

MONTHLY WEATHER REVIEW.

VOL. XX.

WASHINGTON, D. C., DECEMBER, 1892.

No. 12.

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INTRODUCTION.

This REVIEW is based on reports for December, 1892, from 2,893 regular and voluntary observers. These reports are classified as follows: 162 reports from Weather Bureau stations; 44 reports from United States Army post surgeons; 1,984 monthly reports from state weather service and voluntary observers; 219 reports through the Central Pacific Rail-

way Company; 455 marine reports through the co-operation of the Hydrographic Office, Navy Department; 29 reports from Canadian stations; marine reports through the "New York Herald Weather Service"; monthly reports from local services established in all states and territories; and international simultaneous observations. Trustworthy newspaper extracts and special reports have also been used.

CHARACTERISTICS OF THE WEATHER FOR DECEMBER, 1892.

The month was colder than usual, except along the South Carolina, Georgia, and Florida coasts, where the normal temperature obtained. Over large areas in the central and northwestern districts and the plateau regions the mean temperature was 5° to 7° below the December average.

The severest cold wave of the month overspread the Southern States from the 26th to the 29th. At Corpus Christi, Tex., ice three-fourths inch in thickness formed, and heavy frost killed vegetation. In Louisiana orange trees in southern parishes were slightly nipped. In Florida the line of freezing weather was carried to the vicinity of Titusville on the 29th. The timely warning issued by the Weather Bureau of the approach of this cold wave prompted precautionary measures against damage by cold and frost in interior and northern districts of Florida.

PRECIPITATION.

The monthly precipitation was deficient, except from the Southwestern States over the Rocky Mountain and plateau regions and in the central valleys of California. The greatest excess in precipitation occurred in western Tennessee, Arkansas, and east-central Texas, where the monthly amount was 7 to 8 inches greater than the December average. The most marked deficiency was noted in New England and the interior of the south Atlantic states, where the monthly precipitation was 2 to 3 inches less than the normal amount.

The greatest depth of snowfall reported was 201 inches at Pikes Peak, Colo. At Olympia, Wash., 52 inches fell, and the monthly snowfall was 40 to 50 inches at points in northern Upper Michigan, central New York, and western Oregon. Heavy rain from the 1st to the 3d flooded streams in California. From the 20th to the 23d a heavy snowstorm prevailed over the north Pacific coast states. Snow fell to a depth of one to two feet over western Washington and northwestern Oregon, blockading railroads. Heavy rain from the 21st to the 25th caused destructive floods in the Sacramento and San Joaquin valleys, California. The cold wave of the 26th to 29th over the Southeastern States was attended by an exceptionally heavy fall of snow. At Norfolk, Va., the total depth of snow, 19 inches, was reported the greatest fall at that place since 1857, and at points in northern Florida the snow was reported the first that had fallen since 1857.

STORMS.

Exceptionally severe gales prevailed over California from the 1st to the 3d. From 11 a. m. to 5.30 p. m. of the 6th a group of tornadoes visited northeastern Texas. About 11 p. m. of that date a tornado was reported at Paragould, Ark. Destructive gales prevailed over California, Oregon, and Washington from the 20th to the 24th.

CLOSING OF NAVIGATION.

Navigation was closed by ice at all ports on the Great Lakes, and in the rivers of the Middle and Northern States.

ATMOSPHERIC PRESSURE (expressed in inches and hundredths).

The distribution of mean atmospheric pressure for December, 1892, as determined from observations taken daily at 8 a. m. and 8 p. m. (75th meridian time), is shown on Chart II by isobars.

In December the atmospheric pressure is usually highest over the middle plateau region and in an area covering eastern Tennessee and adjoining parts of the Carolinas and Georgia, where it is above 30.20, and is lowest over the Gulf of Saint Lawrence, where it is below 29.95. From the extreme northeastern and northwestern parts of the country

the barometric gradient is marked to the Iceland and Bering Sea areas of low pressure, where the normal values are below 29.50 and 29.60, respectively. The pressure increases over the United States, except from the middle plateau region to the north Pacific coast, the most marked increase being shown in the Red River of the North Valley, where it exceeds .05.

In December, 1892, the mean pressure was highest over the middle plateau region, where it was above 30.25, the highest mean reading, 30.30, being noted at Idaho Falls, Idaho. From the middle and northern plateau regions to the middle

Missouri river the mean pressure was above 30.20, and from the Rocky Mountain and plateau regions, over the Ohio Valley, and in the north part of the Gulf States it was above 30.15. The mean pressure was lowest over the Gulf of Saint Lawrence, where it was below 29.75, and the mean readings were below 29.90 over eastern Maine and the Canadian Maritime Provinces.

A comparison of the pressure chart for December, 1892, with that of the preceding month shows an increase of pressure, except over the Gulf and south Atlantic states, New England, and the Saint Lawrence Valley. The greatest increase of pressure occurred over the northern Rocky Mountain region, where it exceeded .20, and the increase was more than .10 from the Dakotas and Nebraska to the middle and north Pacific coast states. The most marked decrease of pressure was noted over Nova Scotia, where it was .20 to .25; at points on the middle Gulf and south Atlantic coasts the decrease was .05.

The mean pressure was generally above the normal, except in the Southern, Southwestern, and Atlantic coast states. The greatest departure above the normal pressure was reported over Washington, where it was .10 to .18; the departure above the normal pressure exceeded .05 over the northern Rocky Mountain and plateau regions and in an area extending from the extreme upper Mississippi valley over Lower Michigan. The most marked departure below the normal pressure was noted over the Canadian Maritime Provinces, where it was .10 to .15, and the departure below the normal was more than .05 over the interior of the middle Gulf states.

HIGH AND LOW AREAS.

The tracks of areas of high and low barometric pressure for December, 1892, are plotted on Charts IV and I, respectively, and some of the more prominent features of the areas are shown in the table at the end of this chapter.

HIGH AREAS.

Six high areas appeared, the average number traced for December during the last 18 years being 8.2. All of the high areas traced for the current month advanced southeastward from the northern Rocky Mountain region and reached the middle or south Atlantic coasts. The average rate of advance of the high areas, 28 statute miles per hour, corresponded with the average velocity of high areas for December of preceding years.

I.—Was a continuation of high area X for November, 1892, and at the opening of the month occupied the western lake region and the upper Ohio valley, with pressure above 30.30. This high area moved southeastward and disappeared off the coast by the night of the 2d.

II.—Appeared north of Montana the evening of the 1st, with pressure 30.20. On that date the temperature fell more than 20° in Utah and southern Idaho, and was below zero north of Montana. During the 2d the high area moved slowly eastward, the temperature fell 20° to 30° from Wyoming to Minnesota, and the morning minimum at Medicine Hat, N. W. T., was -18°. During the 3d this high area advanced to Manitoba, the temperature fell 10° to 20° from Lake Superior to Texas, and a reading of -12° was noted at Winnipeg, Man. Moving eastward to Lake Superior by the evening of the 4th the high area passed thence southeastward off the North Carolina coast by the morning of the 6th, its passage being unattended by marked temperature changes over the eastern part of the country.

III.—Apparently advanced from the region north of Washington, and the morning of the 8th occupied the northern plateau, with pressure above 30.50. On that date the temperature fell more than 20° in the middle Saskatchewan valley. During the 9th this high area advanced to Utah. The morn-

ing report of the 9th showed a fall in temperature of 40° to 50° in northwestern North Dakota, and a minimum temperature of -20° at Bismarck, N. Dak. By the evening of that date a fall in temperature of 20° to 26° occurred over South Dakota.

During the 10th the high area advanced to the middle Mississippi valley, the cold wave overspread the Ohio and upper Mississippi valleys, and the line of freezing temperature reached northern Arkansas. During the 11th the high area advanced to West Virginia with pressure above 30.60, and by the night of the 12th had passed off the middle Atlantic coast. On the 11th a slight fall in temperature occurred in the middle Atlantic and New England states, and the morning of the 12th freezing weather was reported in northern South Carolina.

IV.—From the 12th to the 18th the pressure continued high over the north Pacific coast states. On the 18th the temperature fell 20° to 30° over North Dakota and Manitoba. By the morning of the 19th the pressure had risen to 30.60 over Alberta, the temperature had fallen 20° to 40° over the Dakotas and Minnesota, and a reading of -16° was noted at Saint Vincent, Minn. By the evening of the 19th the high area had moved southeastward, the temperature had fallen 20° to 30° over Iowa and northern Missouri, and a reading of -2° was reported at Des Moines, Iowa.

During the 20th the high area advanced to the lower Ohio valley. The morning report of that date showed a fall in temperature of 20° to 30° in the middle and upper Mississippi valleys, and by the evening report the cold wave had reached the Atlantic coast, with a fall in temperature of 20° to 30° in the middle Gulf states and over northwestern New England. During the 21st the high area passed off the Virginia coast, and the morning report showed freezing weather in the north part of the Gulf States.

V and Va.—High pressure continued in the Northwest, following the passage of high area IV. On the 20th the temperature fell 20° to 30° from the middle plateau region over the western Saskatchewan valley. The morning of the 21st the pressure was above 31.00 over Alberta, the temperature had fallen 20° to 26° over Nebraska, where the minimum was -8° to -10°, and a reading of -26° was reported at Swift Current, N. W. T. By the evening report of the 21st the pressure had risen to 31.10 at Swift Current, the temperature had fallen 20° to 30° over Montana and the Saskatchewan Valley, a reading of -30° was noted at Swift Current, and the temperature was below zero in South Dakota. During the 22d the high area moved rapidly southeastward to the lower Ohio valley, the temperature fell 20° in the Red River of the North Valley, and a reading of -24° was reported at Moorhead, Minn. The cold wave attending this high area was not severely felt in the Atlantic coast states.

VI and VIa.—Appeared north of Washington the evening of the 24th, with pressure above 30.60. During the 25th the high area moved slowly eastward north of Montana, and a cold wave extended over Iowa and Missouri, with temperature -32° at Saint Vincent, Minn., and zero to northern Missouri. During the 26th this high area divided, one part passing rapidly southeastward to Oklahoma, and the other advancing eastward over the Red River of the North Valley. On that date the cold wave overspread the middle and west Gulf states, where the temperature fell 20° to 40°, the temperature fell to zero in northern Arkansas, and freezing weather was reported to the Gulf coast.

During the 27th the high area which had moved southeastward disappeared by a decrease of pressure over the Southwest. The high area from the Red River of the North Valley passed southward to Iowa. On that date the temperature fell 20° to 30° in the middle and east Gulf and south Atlantic states, and the line of freezing weather reached northern

Florida. On the 28th the high area reached the lower Mississippi valley, and moving thence slowly eastward passed off the North Carolina coast during the 31st.

LOW AREAS.

The low areas of December advance eastward at an average velocity of 36 statute miles per hour. West of the 100th meridian they usually follow two principal tracks, one from the Pacific coast north of the 50th parallel south of east to the upper lake region, and the other from Vancouver Island southeastward over the middle plateau and Rocky Mountain regions to the lower Missouri valley. Less frequented tracks are traced from the west part of the Gulf of Mexico to the middle Mississippi valley, and along the Atlantic coast line from the Carolinas to the Canadian Maritime Provinces. East of the 100th meridian the low areas generally move toward the Saint Lawrence Valley, where an average of more than five per month are traced, making this the region of greatest storm frequency within the region of observation. An average of one storm per month traverses the North American continent from the Pacific to the Atlantic coasts in December.

The tracks of 11 areas of low pressure are plotted on Chart I for December, 1892, the average number traced for the corresponding month for the last 18 years being 13. Of the low areas traced for the current month 4 advanced from the north Pacific coast, one is traced eastward from the south Pacific coast, 2 first appeared in the Saskatchewan Valley, 2 moved northeastward from the west Gulf coast, and 2 apparently originated on the southeast slope of the Rocky Mountains.

Of the low areas traced from the north Pacific coast 3 reached the Atlantic coast, and one occupied the lower Mississippi valley at the close of the month. The low area from the south Pacific advanced to the Lake region where it disappeared by an increase of pressure. One of the low areas from the Saskatchewan Valley passed eastward over the Gulf of Saint Lawrence, the other dissipated over the Lake region. The low areas from the west Gulf disappeared off the south Atlantic coast, and those from the Southwest passed eastward over or north of the Gulf of Saint Lawrence.

The low areas from the Northwest generally moved southeastward to the central valleys and thence northeastward to the Saint Lawrence Valley. The average rate of advance of low areas, 35 miles per hour, about corresponded with the average velocity of low areas traced for December of preceding years. The following is a description of the low areas referred to:

I.—Was apparently an offshoot of the severe storm which occupied the north Pacific coast the last seven days of November, 1892. At the opening of the month this low area was central over Montana, with pressure below 29.70. During the 1st the center advanced to North Dakota, the temperature rose 10° to 20° in the Northwest, and snow fell in Montana. On the 2d the low area advanced to Lake Superior, a marked rise in temperature occurred in eastern Ontario, and rain or snow fell in the Lake region. By the morning of the 3d the center had passed southeastward to eastern Ontario, where it united with low area Ia, which had advanced from the Southwest.

Ia.—Apparently developed on the southeast slope of the Rocky Mountains. The morning of the 2d the low area was central near Fort Smith, Ark., from which point it advanced to Ohio by the evening report, with a marked rise in temperature in the middle Ohio valley, and rain in the middle Mississippi and lower Ohio valleys and Tennessee. During the 3d the center passed rapidly north of east over the Gulf of Saint Lawrence, the temperature rose 10° to 20° in the south Atlantic states, and rain fell from the Lake region to the east Gulf states.

II.—Occupied the north Pacific coast from the opening of

the month until the morning of the 3d. During that period high winds and heavy rain prevailed in California. Oranges were injured by wind, and heavy rain caused floods throughout the greater part of the state. By the evening of the 3d the center had advanced to western Montana, the temperature had risen 20° to 40° on the northeast slope of the Rocky Mountains, and the rain area had extended from the Pacific coast over Montana.

On the 4th the center advanced to South Dakota, the temperature rose 20° to 30° in the Red River of the North Valley, and rain or snow fell in areas on the northeast slope of the Rocky Mountains. During the 5th the center advanced to the lower Missouri valley, a marked rise in temperature occurred from the Lake region to the east Gulf coast, rain fell in the middle Mississippi valley, rain or snow was reported from Nebraska over the Lake region, and heavy snow fell at Salt Lake City, Utah.

By the evening of the 6th the center had advanced to the Saint Lawrence Valley, with a marked rise in temperature in the middle Atlantic and New England states, and rain or snow had fallen generally in the Lake region, middle Mississippi and Ohio valleys, and thence over the middle Atlantic and New England states.

III.—Appeared over the interior of Texas the morning of the 6th, and by the evening report had advanced to Missouri with pressure below 29.70. On that date rain or snow fell generally in the Western and Southwestern States. In central Kansas and eastern Nebraska exceptionally heavy snow interrupted railroad traffic. Destructive tornadoes were reported in Arkansas and Texas.

During the 7th the center advanced to southern Lake Michigan with a marked increase in energy, the temperature rose 10° to 20° in the Lake Erie region, the wind reached a velocity of 50 miles an hour from the southwest at Chicago, Ill., rain or snow was general from the Lake region to the Gulf coast, and very heavy snow fell from eastern Kansas and eastern Nebraska over Iowa and northwestern Missouri. Moving northeastward the center disappeared north of the region of observation the night of the 8th. On that date rain or snow fell generally over the north-central and northeastern districts, and westerly gales prevailed over the Lake region.

IV.—Appeared over southern California on the 10th, passed eastward to New Mexico during the 11th, reached southern Texas the morning of the 12th, and the evening of that date was central near Shreveport, La. On the 11th heavy rain set in on the west Gulf coast and the rain area extended over Texas and Oklahoma. On the 12th a marked rise in temperature occurred from the west Gulf states to the Lake region, the rain area extended to the Missouri and Ohio valleys, and a storm of sleet and rain set in over parts of the Southwest.

During the 13th the center advanced to southern Lake Michigan with a marked increase of strength, rain or snow fell from the Lake region to the east Gulf coast and thence to the middle Atlantic coast, the temperature rose 10° to 20° in the Ohio Valley and Tennessee, severe local storms were reported in Louisiana and Mississippi, and high winds prevailed over the Lake region. During the 14th this low area disappeared by an increase of pressure over the Lake region.

V.—Appeared over Alberta and moved slowly eastward over the Saskatchewan Valley on the 12th. On that date the temperature rose 10° to 20° on the northeast slope of the Rocky Mountains, and rain or snow fell in the north Pacific coast states. During the 13th the center advanced slowly southeastward, and on the 14th apparently disappeared by an increase of pressure over the Lake region.

VI.—Appeared near the mouth of the Rio Grande River on the 15th, attended by heavy rain generally in the west Gulf states. During the 16th the center moved northeastward to Mississippi, the temperature rose 10° to 20° over the interior

of the east Gulf states, and rain fell generally from the Ohio Valley to the Gulf coast. During the 17th the center disappeared off the North Carolina coast, and the rain area contracted to the Gulf and Atlantic coasts.

VII.—Appeared over the Saskatchewan Valley on the 17th, with pressure below 29.60. On that date the temperature rose 20° to 40° in the Northwest, and snow was reported in western Montana. During the 18th the center passed south-eastward over Lake Superior, a marked rise in temperature occurred from the Lake region over the Southwestern States, and rain or snow fell in the north-central districts. By the evening of the 19th the center had advanced to the lower Saint Lawrence valley, and the rain area had extended over the interior of the Atlantic coast states.

VIII.—Appeared on the west Gulf coast the morning of the 19th and by the evening report had advanced to southern Alabama, with pressure below 29.70. On that date the temperature rose 10° to 16° on the middle Gulf coast, rain fell generally in the Southern and Southwestern States, and southwest to northwest gales prevailed along the middle and west Gulf coasts. By the morning of the 20th the center had moved off the North Carolina coast, with pressure below 29.50. Heavy rain fell generally east of the Mississippi and south of the Ohio rivers, and heavy north to west gales prevailed along the south Atlantic coast.

IX.—From the 21st to the 24th a storm area of great energy covered the middle and north Pacific coast states. During that period the rainfall was unusually heavy in California, exceptionally heavy snow fell in Oregon and Washington, and heavy gales of 50 to 60 miles per hour prevailed along the Pacific coast north of the 35th parallel. During the 24th the storm center apparently moved southeastward over Oregon, the temperature rose more than 20° in Colorado, the rain area extended over the middle and northern plateau regions, and a heavy wind and rain storm prevailed over Oregon and northern California.

Moving rapidly southeastward the center of disturbance reached the west Gulf states the evening of the 25th. On that date a marked rise in temperature occurred in the west Gulf and south Atlantic states, a heavy wind and snow storm set in over Kansas, and rain or snow fell generally in New England, the middle Atlantic states, the Lake region, the central valleys, and along the east Gulf coast.

During the 26th the center advanced to northern Florida, rain changed to snow in the east Gulf states, snow fell to the immediate Gulf coast, and high northeast winds with rain changing at night to sleet and snow set in over the south Atlantic states. During the 27th this low area passed north-eastward off the south Atlantic coast. Heavy snow fell in the south Atlantic states, and high north to northwest winds prevailed on the Carolina coast.

X.—Appeared north of Washington on the 28th, with pressure below 29.60. On the 27th the temperature rose 20° to 30° on the northeast slope of the Rocky Mountains, and rain fell in the north Pacific coast states. On the 28th the temperature rose more than 20° over the eastern Saskatchewan valley, the rain area extended over the middle and northern plateau regions, and south to west gales of 60 to 66 miles per hour prevailed on the Washington coast. Moving rapidly southeastward the center reached Colorado the evening of the 29th. On that date a marked rise in temperature occurred in the central valleys, and snow fell generally over the Missouri Valley and the middle plateau region.

During the 30th the center advanced to southern Texas, the rain area extended from the middle Mississippi valley to New Mexico, and northwest gales prevailed over the southern plateau and southern Rocky Mountain regions. At the close of the month this low area occupied the lower Mississippi valley, with pressure below 29.50. On that date the rain area extended over the Gulf States and the Ohio Valley, a heavy thunderstorm was reported at Mobile, Ala., and high southwest to northwest winds prevailed along the middle and west Gulf coasts.

Tabulated statement showing principal characteristics of areas of high and low pressure.

Barometer.	First observed.			Last observed.			Duration.	Velocity per hour.	Maximum pressure change in 12 hours, maximum abnormal temperature change in 12 hours, and maximum wind velocity.											
	Date.	Lat. N.	Long. W.	Lat. N.	Long. W.				Station.	Rise.	Date.	Station.	Fall.	Date.	Station.	Direction.	Miles per hour.	Date.		
High areas.							Days.	Miles.		Inch.										
I.	1	42	85	40	81	1-0	10		Halifax, N. S.	.14	1	Knoxville, Tenn.	.10	1	Hatteras, N. C.	n.	20	2		
II.	1	52	113	36	75	4-5	22		Salt Lake City, Utah.	.44	1	Pueblo, Colo.	.23	1	Chicago, Ill.	ne.	20	4		
III.	8	45	115	38	76	4-5	23		Grand Haven, Mich.	.48	8	Fort Buford, N. Dak.	.29	8	Havre, Mont.	ne.	34	8		
IV.	19	32	114	37	77	2-0	30		Hatteras, N. C.	.70	20	Huron, S. Dak.	.29	18	Amarillo, Tex.	n.	34	19		
V.	21	32	112	34	85	2-0	37		Swift Current, N. W. T.	.70	21	Swift Current, N. W. T.	.26	21	Key West, Fla.	n.	18	23		
VI.	23	32	104	33	81	3-0	26		do.	.70	21	St. Vincent, Minn.	.11	22	do.	n.	22	24		
VII.	24	33	118	49	97	2-0	31		Fort Smith, Ark.	.54	26	Palestine, Tex.	.34	26	Amarillo, Tex.	n.	48	26		
VIII.	26	52	103	32	76	5-0	23		Calgary, N. W. T.	.32	27	Green Bay, Wis.	.13	27	Hatteras, N. C.	n.	18	29		
Mean						3-0	28			.50			.22					27		
Low areas.										Fall.			Rise.							
I.	1	45	109	45	77	2-0	35		Winnipeg, Man.	.34	1	Cincinnati, Ohio.	.20	3	Lander, Wyo.	sw.	48	1		
II.	1	37	98	45	77	1-5	36		Columbus, Ohio.	.24	2	do.	.20	3	Cleveland, Ohio.	nw.	36	2		
III.	6	48	125	45	73	3-5	35		Albany, N. Y.	.38	6	Qu'Appelle, N. W. T.	.24	3	Fort Canby, Wash.	s.	66	1		
IV.	10	32	100	48	80	2-5	26		Saugeen, Ont.	.54	7	Erie, Pa.	.20	7	Chicago, Ill.	sw.	50	7		
V.	10	32	115	44	81	3-5	30		Detroit, Mich.	.46	13	San Antonio, Tex.	.27	12	Buffalo, N. Y.	sw.	48	14		
VI.	12	33	114	52	100	1-5	18		Medicine Hat, N. W. T.	.46	12	Havre, Mont.	.30	12	Valentine, Nebr.	nw.	26	13		
VII.	15	27	98	36	75	1-5	42		Vicksburg, Miss.	.34	12	Mobile, Ala.	.11	16	Galveston, Tex.	s.	26	15		
VIII.	17	54	105	49	68	2-5	32		Moorhead, Minn.	.64	17	Moorhead, Minn.	.32	17	Chicago, Ill.	sw.	40	18		
IX.	19	39	95	38	74	1-0	54		Hatteras, N. C.	.46	20	Galveston, Tex.	.18	19	Kittyhawk, N. C.	n.	56	20		
X.	24	47	124	30	82	2-5	45		Norfolk, Va.	.48	25	San Antonio, Tex.	.19	25	Fort Canby, Wash.	se.	67	24		
	28	51	122	33	91	3-0	37		Meridian, Miss.	.50	31	Pierre, S. Dak.	.24	29	Tatoosh Island, Wash.	w.	66	28		
Mean						2-3	35			.42			.22					48		

NORTH ATLANTIC STORMS FOR DECEMBER, 1892.

[Pressure in inches and millimeters; wind-force by Beaufort scale.]

The paths of storms that appeared over the west part of the north Atlantic Ocean during December, 1892, are shown on Chart I. These paths have been determined from reports of observations by shipmasters received through the co-operation of the Hydrographic Office, Navy Department, and the "New York Herald Weather Service."

The normal distribution of pressure over the North Atlantic in December shows a belt of high pressure, with values above 30.10 (764), stretching across the ocean between the 30th and 40th parallels. From this belt there is a marked gradient to Iceland and southern Greenland, where the pressure is below 29.50 (749). There is usually an increase of pressure over the southern and eastern parts of the ocean in December. Between the Azores and the coast of the United States, and thence northward, there is a decrease of pressure, the decrease being most marked within the Iceland area of low pressure, where it exceeds .20.

The storms of December usually follow two principal tracks which diverge from the main continental track east of Newfoundland, one running directly into the Iceland low area, the other skirting the southern quadrants of the Iceland low area and passing north of the British Isles. The average velocity of North Atlantic storms in December is about 21 statute miles per hour, and an average of 3 storms traverse the ocean from the American to the European coasts in that month.

The severest storms of December, 1892, prevailed over mid-ocean from the 13th to 17th and 20th to 23d. Six storms advanced eastward from the American coast, 2 of which reached European waters. The following is a description of the storms that appeared during the month:

The month opened with low area XVa for November central south of western Nova Scotia. By the 2d this storm had passed slowly eastward, attended by south to west gales of force 10 to 11 between the 50th and 56th meridians. The morning of the 3d the storm was central south of Newfoundland, with pressure about 29.40 (747), and by the morning of the 4th had united east of Newfoundland with low area I which had advanced from the westward. From that position the storm apparently recurved westward and the morning of the 5th was central south of Newfoundland. Moving northeastward the storm disappeared north of the region of observation after the 7th.

From the 2d to the 4th a storm of moderate strength apparently passed eastward over the British Isles. On the 7th low area II passed south of east over Nova Scotia, and the morning of the 8th was central off the south edge of the Grand Banks, after which it disappeared. On the 12th a storm appeared north of the Grand Banks and passed eastward to mid-ocean by the 15th, where it remained nearly stationary until the 17th attended by southwest to northwest gales of force 10 to 12, after which it apparently passed north of the British Isles. The passage of a storm over or north of the British Isles was indicated by reports of the 10th to 12th.

During the 17th low area VI passed off the North Carolina

coast, and the morning of the 17th was central east of the Grand Banks, with pressure about 28.80 (731), and northwest gales of force 9 to 11. By the 19th the storm had changed position but slightly and southwest winds of hurricane force were encountered near the 40th meridian. From the 20th to the 23d this storm occupied mid-ocean, with pressure falling to 28.20 (716) on the 22d and to 28.30 (719) on the 23d, and westerly gales of force 9 to 11 between the 30th and 40th meridians, after which it apparently shifted position to the westward and united with an area of low pressure which appeared over the Gulf of Saint Lawrence on the 24th.

From the 25th to the 27th the pressure continued very low over and near Newfoundland, barometer readings below 29.00 (736) being reported on the 25th and 26th. By the 28th this storm had advanced to mid-ocean, where it remained nearly stationary until the 29th. On the 30th it occupied the ocean west of Ireland, and at the close of the month was apparently central over the Bay of Biscay, with pressure below 29.50 (749). On the 27th low area IX moved northeastward off the south Atlantic coast, with pressure below 29.50 (749), and northeast gales of force 9. The morning of the 28th the storm was north of Bermuda. By the 29th it had reached mid-ocean, and by the 30th it had united with the storm that occupied the ocean west of Ireland.

OCEAN ICE IN DECEMBER.

Arctic ice was not reported for December, 1892. In December, 1882, 1883, 1884, 1886, and 1888 no Arctic ice was reported near Newfoundland and the Grand Banks. In 1885 several icebergs were observed off the Newfoundland coast the early part of the month. In 1887 a small iceberg was reported in N. 46° 10', W. 47° 28' on the 26th, and a small iceberg in N. 48° 20', W. 48° 40' on the 28th. In 1889 large quantities of Arctic ice were reported over and near the Grand Banks. In 1890 a large berg was observed in N. 49° 39', W. 47° 50' on the 13th.

OCEAN FOG IN NOVEMBER.

The limits of fog belts west of the 40th meridian, as determined by reports of shipmasters, are shown on Chart I by dotted shading. East of the 55th meridian fog was reported on 10 dates; between the 55th and 65th meridians on 3 dates; and west of the 65th meridian on 4 dates. Compared with the corresponding month of the last 5 years the dates of occurrence of fog east of the 55th meridian numbered 6 more than the average; and west of the 55th meridian 2 less than the average. The occurrence of fog along the steamship tracks west of the 40th meridian and at stations of the Weather Bureau on the New England and middle Atlantic coasts generally attended the approach or passage of general storms.

TEMPERATURE OF THE AIR (expressed in degrees Fahrenheit).

The distribution of mean temperature over the United States and Canada for December, 1892, is exhibited on Chart II by dotted isotherms. In the table of miscellaneous meteorological data the monthly mean temperature and the departure from the normal are given for regular stations of the Weather Bureau. The figures opposite the names of the geographical districts in the columns for mean temperature and departure from the normal show, respectively, the average for the several districts. The normal for any district may be found by adding the departure to the current mean when the temperature is below the normal and subtracting when above. The monthly mean temperature for regular stations of the Weather Bureau represents the mean of the maximum and minimum temperatures.

Over the greater part of the Florida Peninsula and in the extreme lower Rio Grande valley the mean temperature was above 60. It was above 55 along the immediate Gulf coast and in the Colorado Desert, California, and the mean readings were above 50 over the southern half of the Gulf States, in the lower Colorado and Gila valleys, and along the California coast from San Francisco southward. The mean temperature was lowest in the region north of North Dakota, where it was below zero. It was below 10 over the northern half of Minnesota, in North Dakota, northeastern Montana, and at Climax, Colo., and the mean readings were below 20 over northern New England, Upper Michigan, Wisconsin, Iowa, and north of a line traced from east-central Nebraska to northwestern Montana. The mean temperature was also below 20 in the middle Rocky Mountain region.

DEPARTURE FROM NORMAL TEMPERATURE.

The mean temperature was generally below the normal, the only excess being shown in New Brunswick, over the Florida Peninsula, and on the Georgia and South Carolina coasts. The most marked departure below the normal temperature was noted in an area extending from Wisconsin to eastern Colorado and Oklahoma, where the mean readings were 5 to 8 below the normal. In an area extending from eastern Montana and the western Dakotas to northern Utah the month was 5 to 7 colder than usual. The departure below the normal was 5 to 6 in southeastern Washington and Arizona. In the localities named where the temperature was above the normal the excess was less than 2.

The following table shows for certain stations, as reported by voluntary observers, (1) the normal temperature for December for a series of years; (2) the length of record during which the observations have been taken, and from which the normal has been computed; (3) the mean temperature for December, 1892; (4) the departure of the current month from the normal; (5) and the extreme monthly mean for December during the period of observation and the years of occurrence:

State and station.	(1) Normal for the month of Dec.	(2) Length of record.	(3) Mean for Dec., 1892.	(4) Departure from normal.	(5) Extreme monthly mean for December.			
					Highest.	Year.	Lowest.	Year.
Arizona.	°	Years	°	°	°		°	
Fort Apache	37.7	21	34.6	- 3.1	45.0	1889	27.6	1891
Fort Mohave	53.3	20	49.4	- 3.9	59.2	1875	47.6	1891
Whipple Barracks	38.0	20	33.4	- 4.6	42.2	1889	31.4	1891
Arkansas.								
Keesees Ferry	39.9	11	36.2	- 3.7	55.3	1889	29.1	1884
California.								
Fort Bidwell	33.2	19	30.1	- 3.1	39.9	1886	25.2	1873
Riverside	52.9	10	51.0	- 1.9	56.5	1882	48.3	1891
Colorado.								
Las Animas	30.9	9	28.5	- 2.4	41.9	1889	19.5	1884
Florida.								
Merritts Island	63.1	10	64.9	+ 1.8	68.0	1891	58.0	1885
Georgia.								
Forsyth	49.9	18	51.4	+ 1.5	61.3	1889	39.8	1876
Idaho.								
Boise Barracks	33.1	17	33.4	+ 0.3	37.7	1886	28.1	1884
Fort Sherman	31.5	9	22.6	- 8.9	37.9	1890	16.0	1884
Indiana.								
Lafayette	30.3	11	27.2	- 3.1	43.8	1889	21.3	1880
Indian Territory.								
Fort Supply	38.3	12	29.9	- 8.4	49.2	1889	29.9	1887, 1892
Iowa.								
Cresco	17.9	31	13.6	- 4.3	34.0	1877	4.5	1876
Kansas.								
Eureka Ranch	33.4	9	25.0	- 8.4	43.6	1889	21.3	1884
Independence	35.2	20	32.3	- 2.9	49.3	1889	25.4	1884
Salina	33.4	10	26.9	- 6.5	44.4	1889	23.2	1885
Louisiana.								
Grand Coteau	56.1	10	55.4	- 0.7	65.0	1889	51.8	1887
Maine.								
Orono	21.3	22	21.3	0.0	31.6	1891	11.4	1890
Maryland.								
Cumberland	32.1	21	31.6	- 0.5	43.2	1889	26.0	1880
Michigan.								
Kalamazoo	29.8	16	25.0	- 4.8	40.2	1889	16.7	1876
Missouri.								
Sedalia	37.3	7	29.1	- 8.2	49.4	1889	25.7	1886
Montana.								
Fort Custer	23.4	13	.....	.....	33.1	1885	5.6	1884
Nebraska.								
Fort Robinson	29.0	8	25.2	- 3.8	38.0	1889	12.4	1884
Genoa (near)	23.8	17	22.0	- 1.8	35.4	1889	11.8	1879
Nevada.								
Browns	35.2	20	34.8	- 0.4	42.1	1871	26.8	1873
Carson City	34.3	15	30.2	- 4.1	40.8	1886	29.1	1891
New Hampshire.								
Hanover	20.8	21	20.2	- 0.6	30.5	1881	10.2	1872
New Mexico.								
Deming	46.3	10	50.1	+ 3.8	53.1	1884	38.4	1891
Fort Wingate	32.8	21	31.2	- 1.6	41.0	1889	23.7	1887
New York.								
Cooperstown	27.3	21	21.7	- 5.6	33.9	1891	14.7	1876
Plattsburg Barracks	21.8	21	19.6	- 2.2	33.8	1891	11.3	1890
North Carolina.								
Lenoir	38.4	20	37.7	- 0.7	48.9	1889	29.1	1876
Oklahoma.								
Fort Reno	40.1	9	35.8	- 4.3	52.6	1889	27.9	1884
Fort Sill	40.4	20	37.7	- 2.7	52.3	1889	31.0	1884
Oregon.								
Bandon	46.9	8	45.1	- 1.8	52.5	1888	43.6	1884
Pennsylvania.								
Dyberry	25.7	21	22.6	- 3.1	34.6	1891	17.3	1876
Grampian	25.9	21	24.6	- 1.3	37.0	1877	16.0	1876
Wellaboro	29.9	13	24.0	- 5.9	39.5	1881	22.2	1890

Departures from normal temperature—Continued.

State and station.	(1) Normal for the month of Dec.	(2) Length of record.	(3) Mean for Dec., 1892.	(4) Departure from normal.	(5) Extreme monthly mean for December.			
					Highest.	Year.	Lowest.	Year.
South Carolina.	°	Years	°	°	°		°	
Statesburg	47.9	11	46.4	- 1.5	56.6	1889	43.6	1882
South Dakota.								
Fort Sully	19.2	21	16.4	- 2.8	30.0	1881	2.9	1879
Texas.								
Austin	50.2	20	49.8	- 0.4	65.5	1889	42.1	1872
Silver Falls	46.2	6	37.6	- 8.6	56.1	1889	37.6	1892
Utah.								
Terrace	27.8	20	28.3	+ 0.5	37.0	1888	17.0	1878
Vermont.								
Stratford	22.1	19	19.5	- 2.6	31.2	1891	13.4	1890
Virginia.								
Dale Enterprise	38.8	13	30.8	- 8.0	49.0	1889	28.4	1882
Washington.								
Fort Townsend	41.0	17	38.0	- 3.0	45.3	1885	33.0	1884
West Virginia.								
Parkersburg	38.8	11	31.8	- 7.0	47.2	1889	29.6	1886
Wisconsin.								
Embarrass	22.0	21	14.0	- 8.0	35.4	1877	6.5	1872
Madison	23.3	14	18.3	- 5.0	38.4	1877	10.8	1876
Wyoming.								
Fort Washakie	23.6	9	16.4	- 7.2	29.6	1889	16.4	1892

YEARS OF HIGHEST MEAN TEMPERATURE FOR DECEMBER.

The highest mean temperature for December was noted generally over New England and eastern New York in 1891; over northern North Dakota, the northern plateau region, and southern California in 1890; from the middle and southern Rocky Mountain regions eastward to the middle and south Atlantic coasts in 1889; along the north Pacific coast and over Oregon, northern California, and northern Nevada in 1886; on the northeast slope of the Rocky Mountains in 1885; and from the upper Mississippi valley over the upper lake region in 1877.

YEARS OF LOWEST MEAN TEMPERATURE FOR DECEMBER.

At Narragansett Pier, R. I., Silver Falls, Tex., Fort Supply, Ind. T., Rapid City, S. Dak., and Fort Washakie, Wyo., the mean temperature for the current month was the lowest noted for December during the respective periods of observation. The lowest mean temperature for December was noted at points in California, Nevada, and New Mexico in 1891; in the middle and northern Rocky Mountain regions in 1884; and generally east of the Mississippi River and south of the Lake region in 1876.

MAXIMUM TEMPERATURE.

At Memphis, Tenn., Galveston, Tex., and Wilmington, N. C., the maximum temperature for the current month was as high as previously reported for December.

The highest temperature reported by a regular station of the Weather Bureau for December, 1892, was 82, at Titusville, Jupiter, Tampa, and Key West, Fla. The maximum temperature rose to 81 at Los Angeles, Cal., and was 80 at San Antonio and Corpus Christi, Tex. North of a line traced from the Virginia coast to west-central Georgia, thence to north-central Kentucky, thence to southern New Mexico, and thence to the California coast south of San Francisco, the maximum values were above 70. At Saint Vincent, Minn., the highest temperature reached was 34, on the 1st, and the maximum readings were below 40 over the north part of the upper lake region, in northern Minnesota, northern North Dakota, and northeastern Montana. Reports of voluntary observers show maximum temperature above 80 at points in the Southern and Southwestern States, and in southern Arizona and southern California.

MINIMUM TEMPERATURE.

At Nantucket and Vineyard Haven, Mass., and Walla Walla, Wash., the minimum temperature was the lowest reported for December during the respective periods of observation.

The lowest temperature reported by a regular station of the Weather Bureau was -34 , at Saint Vincent, Minn., on the 23d. The minimum temperature was below -20 over northern Minnesota, North Dakota, and on the northeast slope of the Rocky Mountains; it was below -10 in northern New Hampshire and northern Vermont, and north of a line traced from western Upper Michigan to Chicago, Ill., thence to southern Colorado, and thence northwestward to extreme western Montana. The line of zero temperature is traced from the Massachusetts coast, over the lower lake region, thence to Oklahoma, thence over northern New Mexico and Utah, and thence northward over Idaho. At Key West, Fla., the minimum temperature was 54 .

LIMITS OF FREEZING WEATHER.

The southern limit of freezing weather is shown on Chart V by a line crossing the Florida Peninsula north of Titusville and Tampa. The western limit of freezing weather is shown by a line traced just inside the California coast line south of the 40th parallel.

RANGES OF TEMPERATURE.

The greatest daily ranges of temperature are shown in the table of miscellaneous meteorological data. The greatest monthly range of temperature occurred over western Missouri and southeastern Colorado, where it exceeded 80 . From the west-central states the monthly ranges decreased to less than 40 over northern Lower Michigan, and increased thence eastward to more than 45 on the south New England coast. The monthly range decreased southeastward to less than 30 over extreme southern Florida, southward to less than 60 on the immediate Gulf coast, and westward to less than 30 at points along the immediate middle and north Pacific coasts.

PERIODS OF LOW TEMPERATURE.

From the 1st to the 3d a cold wave advanced from Utah and southern Colorado to the Mississippi Valley, with temperature 12 to 18 below zero in the British Northwest Territory on the 2d and 3d. This cold wave did not reach the Atlantic coast states. From the 5th to the 9th a cold wave advanced from the northeast slope of the Rocky Mountains to the south Atlantic states. From the 8th to 11th a cold wave advanced from the Saskatchewan Valley to the middle Atlantic and New England states. Attending the advance of this cold wave the temperature fell 40 to 50 over northern North Dakota, and reached -20 at Bismarck, N. Dak., on the 9th. On the 10th the line of freezing weather reached Arkansas, and on the 12th freezing weather was reported in northern South Carolina.

From the 18th to the 20th a cold wave advanced from the extreme northwest to the Gulf States and New England. On

the 19th the temperature reached -16 at Saint Vincent, Minn., and the line of zero temperature reached Keokuk, Iowa. On the 21st the temperature fell to freezing over the north part of the Gulf States. From the 20th to the 22d a severe cold wave overspread the Northwest. On the 21st the temperature fell to -30 at Swift Current, N. W. T., and was below zero in South Dakota. On the 22d a reading of -24 was noted at Moorhead, Minn.

A severe cold wave advanced from the Northwest to the Gulf and south Atlantic coasts from the 25th to the 27th. On the 25th the temperature reached -32 at Saint Vincent, Minn., and fell to zero in northern Missouri. On the 26th the line of zero temperature reached Arkansas and freezing weather extended to the Gulf coast. On the 27th the line of freezing weather reached northern Florida. During the 30th and 31st a cold wave advanced from the Northwest to the west Gulf coast.

FROST.

Frost injurious to vegetation was reported as follows: On the 9th heavy frost injured tender vegetation in the Mission Valley, near San Diego, Cal. A report from Los Angeles, Cal., dated the 10th stated that frost injured tender plants and vines in exposed places. At Fall Brook, Cal., frost damaged tomatoes on the 12th. On the 27th, at Corpus Christi, Tex., heavy frost killed vegetation, and ice three-fourths of an inch in thickness formed.

Heavy frost was reported generally over interior and northern parts of the Florida Peninsula on the 29th. Timely warning was given and much loss was avoided by covering plants and the protection afforded by smudge fires. At Deland, Fla., the temperature fell to 28 and was below the freezing point 7 hours, one and one-half hour of which was after sunrise; orange trees were slightly nipped in that locality. From the 26th to the 29th the weather was exceptionally cold over the Gulf States. In Louisiana tender vegetation was killed, sugar cane still standing was frozen, and orange trees in southern parishes were slightly nipped.

The first light frost of the season was reported on the 6th at Gila Bend, Ariz., and San Diego and San Francisco, Cal.

The first heavy frost of the season was reported as follows: 6th, Tucson, Walnut Ranch, and Wilgus, Ariz. 7th, El Paso, Tex. 8th, Astoria, Oregon; East Sound, Wash. 10th, Boerne, Brownwood, and Burnet, Tex. 12th, Fall Brook, Cal. 16th, Farleys Camp, Ariz.; Duarte, Cal. 17th, Fort Canby, Wash. 20th, Red Rock, Ariz. 21st, Napa, Cal. 23d, Pensacola, Fla. 26th, Emilie, La.; Brenham and Galveston, Tex. 27th, Corpus Christi, Cuero, and Flower Bluff, Tex. 28th, Eustis, Fla. 29th, Federal Point, Homeland, Jupiter, Mosely Hall, Micco, Tampa, and Titusville, Fla.

PRECIPITATION (expressed in inches and hundredths).

The distribution of precipitation over the United States and Canada for December, 1892, as determined from reports of more than 2,000 stations, is exhibited on Chart III. In the table of miscellaneous meteorological data the total precipitation and the departure from the normal are given for regular stations of the Weather Bureau. The figures opposite the names of the geographical districts in the columns for precipitation and departure from the normal show, respectively, the averages for the several districts. The normal for any district may be found by adding the departure to the current mean when the precipitation is below the normal and subtracting when above.

In December the monthly precipitation is usually greatest on the north Pacific coast, where it exceeds 10.00 ; the normal amount exceeds 8.00 along the Pacific coast north of the

38th parallel, in parts of northeastern California, and in a small area in northeastern Louisiana; and exceeds 4.00 from the middle and east Gulf coasts to the middle Ohio valley, along the immediate Atlantic coast from North Carolina to southern New England, and over Nova Scotia and southeastern Maine. Except in parts of the northern plateau region, the monthly precipitation is less than 1.00 over the greater part of the Rocky Mountain and plateau regions, and thence over Kansas, Nebraska, the Dakotas, and Minnesota.

In December, 1892, the monthly precipitation exceeded 10.00 over the greater part of northern California, and along the Oregon and Washington coasts. The monthly amount was also in excess of 10.00 from western Tennessee over eastern and southern Arkansas, and in the vicinity of Pales-

tine, Tex. Along the middle and southern California coasts, in the upper valley of the Columbia River, in the mountains of Colorado, and over the greater part of the middle and west Gulf states the monthly precipitation was 4.00 to 6.00. Generally over the middle and southern plateau regions and from the Rocky Mountains over the Missouri and extreme upper Mississippi valleys, the monthly precipitation was less than 1.00. At stations in the Colorado Valley no precipitation was reported.

DEPARTURE FROM NORMAL PRECIPITATION.

The monthly precipitation was generally deficient, except over the Rocky Mountain and plateau regions, in the South-western States, and in the central valleys of California. The most marked deficiency in precipitation was noted generally in New England, where it was more than 2.00. The deficiency also exceeded 2.00 in the interior of the south Atlantic states, and along the immediate north Pacific coast. The greatest excess in precipitation occurred over the interior of the west Gulf states, where the rainfall was 4.00 to 8.00 greater than the December average.

The following table shows for certain stations, as reported by voluntary observers, (1) the average precipitation for December for a series of years; (2) the length of record during which the observations have been taken and from which the average has been computed; (3) the total precipitation for December, 1892; (4) the departure of the current month from the average; (5) and the extremes for December during the period of observation and the years of occurrence:

State and station.	(1) Average for the month of Dec.	(2) Length of record.	(3) Total for Dec., 1892.	(4) Departure from average.	(5) Extremes for December.			
					Greatest.		Least.	
					Am't.	Year.	Am't.	Year.
<i>Arizona.</i>	<i>Inches.</i>	<i>Years.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>	
Fort Apache	1.71	16	0.69	- 1.02	5.52	1884	0.08	1882
Fort Mohave	1.37	19	.....	.....	11.17	1889	0.00	*
Whipple Barracks	1.85	20	0.61	- 1.24	7.38	1889	0.00	*
<i>Arkansas.</i>								
Keesees Ferry	3.29	11	3.17	- 0.12	11.37	1884	1.15	1889
<i>California.</i>								
Fort Bidwell	3.39	19	2.64	- 0.75	6.60	1879	0.13	1874
Riverside	2.02	12	1.58	- 0.44	6.87	1889	0.17	1886
<i>Colorado.</i>								
Las Animas	0.41	10	0.50	+ 0.09	1.68	1883	0.00	1889
<i>Florida.</i>								
Merritts Island	2.52	14	1.66	- 0.86	8.55	1888	0.00	1889
<i>Georgia.</i>								
Forsyth	4.37	18	4.44	+ 0.07	7.56	1887	0.79	1889
<i>Idaho.</i>								
Boise Barracks	2.24	19	0.94	- 1.30	5.96	1871	0.01	1877
Fort Sherman	3.18	9	4.80	+ 1.62	5.85	1889	1.48	1885
<i>Indiana.</i>								
Lafayette	2.60	12	1.55	- 1.05	6.27	1884	0.23	1890
<i>Indian Territory.</i>								
Fort Supply	0.66	12	1.80	+ 1.14	3.19	1885	0.00	1886, 1889
<i>Iowa.</i>								
Cresco	1.42	21	1.22	- 0.20	3.44	1891	0.30	1874
<i>Kansas.</i>								
Independence	2.17	20	3.00	+ 0.83	5.17	1879	0.53	1889
Salina	0.67	10	2.52	+ 1.85	2.52	1892	T.	1889, 1890
<i>Louisiana.</i>								
Grand Coteau	5.32	9	4.63	- 0.69	14.43	1884	2.27	1890
<i>Maine.</i>								
Orono	3.99	22	2.26	- 1.73	7.92	1878	1.50	1875
<i>Maryland.</i>								
Cumberland	2.25	21	1.73	- 0.52	4.50	1881	0.70	1870
<i>Michigan.</i>								
Kalamazoo	2.81	16	1.97	- 0.84	7.14	1884	1.35	1890
<i>Missouri.</i>								
Sedalia	1.96	14	2.80	+ 0.84	4.77	1884	0.53	1886
<i>Montana.</i>								
Fort Custer	0.84	13	.....	.....	1.87	1883	0.09	1885
<i>Nebraska.</i>								
Fort Robinson	0.71	9	0.50	- 0.21	1.97	1883	0.01	1890
Genoa (near)	0.83	17	0.76	- 0.07	1.75	1883	0.00	1875, 1890
<i>Nevada.</i>								
Brown	0.50	20	0.81	+ 0.31	2.01	1871	0.00	1872, 1876
Carson City	2.23	15	1.89	- 0.34	5.43	1891	0.00	1876
<i>New Hampshire.</i>								
Hanover	2.57	21	0.96	- 1.61	4.69	1878	0.78	1875
<i>New Mexico.</i>								
Deming	0.37	8	0.60	+ 0.23	1.35	1884	0.00	1886, 1889
Fort Wingate	0.94	21	0.70	- 0.24	2.29	1871	0.10	1886
<i>New York.</i>								
Cooperstown	2.69	21	1.53	- 1.16	6.02	1881	0.97	1877
Plattsburg Barracks	1.89	21	1.44	- 0.45	3.33	1878	0.17	1886
<i>North Carolina.</i>								
Lenoir	3.72	18	1.50	- 2.22	8.70	1877	0.50	1889

Departures from average precipitation—Continued.

State and station.	(1) Average for the month of Dec.	(2) Length of record.	(3) Total for Dec., 1892.	(4) Departure from average.	(5) Extremes for December.			
					Greatest.		Least.	
					Am't.	Year.	Am't.	Year.
<i>Oklahoma.</i>	<i>Inches.</i>	<i>Years.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>	
Fort Reno	1.09	9	4.40	+ 3.31	4.40	1892	0.00	1886
Fort Sill	1.60	20	2.98	+ 1.38	4.07	1874	0.00	1889
<i>Oregon.</i>								
Bandon	11.37	14	17.17	+ 5.80	17.17	1892	4.93	1878
<i>Pennsylvania.</i>								
Dyberry	2.80	21	1.76	- 1.04	5.29	1890	1.20	1874
Grampian	3.74	15	1.36	- 2.38	5.15	1891	1.36	1892
Wellsboro	4.65	13	0.40	- 4.25	9.57	1881	0.40	1892
<i>South Carolina.</i>								
Statesburg	2.92	11	1.76	- 1.16	5.87	1884	0.75	1889
<i>South Dakota.</i>								
Fort Sully	0.47	21	0.72	+ 0.25	2.48	1877	0.00	1881
<i>Texas.</i>								
Austin	2.85	19	8.49	+ 5.64	9.00	1891	0.19	1886
Silver Falls	0.61	5	0.92	+ 0.31	2.03	1891	0.00	1889
<i>Utah.</i>								
Terrace	0.76	19	0.50	- 0.26	2.12	1877	0.00	1874, 1878
<i>Vermont.</i>								
Stratford	3.27	19	1.55	- 1.72	5.90	1878	0.15	1875
<i>Virginia.</i>								
Dale Enterprise	2.50	12	2.71	- 0.09	6.81	1881	0.13	1882
<i>Washington.</i>								
Fort Townsend	2.77	18	3.42	+ 0.65	5.34	1891	1.14	1879
<i>West Virginia.</i>								
Parkersburg	2.09	7	1.73	- 0.36	4.20	1890	0.02	1885
<i>Wisconsin.</i>								
Embarrass	2.60	21	1.17	- 1.52	5.80	1887	0.45	1878
Madison	1.98	20	2.19	+ 0.21	5.73	1884	0.45	1874
<i>Wyoming.</i>								
Fort Washakie	0.43	9	1.04	+ 0.61	2.29	1886	0.00	1890

* Frequently.

Considered by districts the average percentage of the normal in districts where the precipitation was in excess was about as follows: middle-eastern slope of the Rocky Mountains, 186; west Gulf states, 179; southeast slope of the Rocky Mountains, 151; middle Pacific coast, 125; northeast slope of the Rocky Mountains and Ohio Valley and Tennessee, 112; Missouri Valley and middle plateau region, 108. In districts where the precipitation was deficient the percentage of the normal was about as follows: Key West, Fla., 46; New England, 47; lower lake region, 52; southern plateau, 58; south Atlantic states, 59; middle Atlantic states, 64; upper lake region, 68; south Pacific coast and extreme northwest, 71; north Pacific coast, 86; east Gulf states, 88; upper Mississippi valley, 95. Over the northern plateau region the monthly precipitation was about normal.

YEARS OF GREATEST PRECIPITATION FOR DECEMBER.

At Memphis, Tenn., Palestine, Tex., Fort Reno, Okla., Salina, Kans., Cheyenne, Wyo., and Bandon, Oregon, the precipitation for the current month was the greatest noted for December during the respective periods of observation. The greatest precipitation for December occurred generally over the plateau regions in 1889; in the middle and lower Mississippi and lower Ohio valleys and the upper lake region in 1884; on the northeast slope of the Rocky Mountains and in the central valleys of California in 1880; in the middle Ohio valley and Tennessee in 1879; over the greater part of New York and New England in 1878; and along the Carolina coast in 1877.

YEARS OF LEAST PRECIPITATION FOR DECEMBER.

At Grampian and Wellsboro, Pa., Indianapolis, Ind., and Saint Vincent, Minn., the precipitation for the current month was the least reported for December during the respective periods of observation. The least precipitation for December occurred generally in the Gulf and middle and south Atlantic states, Kentucky, and Tennessee in 1889; in the lower lake region in 1874; and in the Lake Michigan region in 1872.

EXCESSIVE PRECIPITATION.

The following tables show, by states, the number of stations reporting monthly precipitation to equal or exceed 10.00; pre-

precipitation to equal or exceed 2.50 in 24 hours; and precipitation to equal or exceed 1.00 in 1 hour in December, 1892:

Monthly precipitation to equal or exceed 10.00.

State.	Number of stations.	State.	Number of stations.
California	35	Washington	3
Arkansas	16	Texas	2
Oregon	6	Colorado	1
Tennessee	3	Louisiana	1

Precipitation to equal or exceed 2.50 in 24 hours.

State.	Number of stations.	Dates.	State.	Number of stations.	Dates.
California	30	1, 2, 3-3, 21, 22, 22-23, 22-24, 23, 23-24, 23-25, 24, 25, 27.	Oregon	5	20-21, 21, 21-22, 26.
Arkansas	26	11-12, 12, 12-13, 13, 15, 15-16, 16, 30, 30-31.	Kentucky	4	12-13, 13, 30-31.
Texas	13	6, 11-12, 12, 12-13, 30, 30-31.	Mississippi	3	12-13, 13.
Louisiana	7	12, 12-13, 13, 16, 31.	Florida	2	11, 17.
Tennessee	7	12, 12-13, 14, 16, 19, 30.	Indian Territory	2	6-11, 12.
			Missouri	2	6, 30-31.
			Oklahoma	2	5-6, 6.
			Washington	2	20-21.
			Alabama	1	16-17.
			Colorado	1	5-6, 15-16, 20-21.

Precipitation to equal or exceed 1.00 in 1 hour.

Louisiana	1	6.	Mississippi	1	7.
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Table of excessive precipitation, December, 1892.

State and station.	Monthly rainfall to inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
<i>Alabama.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>	<i>A. M.</i>	
Mobile	10.30	3.50	13			
<i>Arkansas.</i>						
Arkadelphia	10.30	3.50	13			
Arkansas City	13.44	4.00	12			
Brinkley	11.73	4.03	12			
Camden a.	12.51	2.80	15-16			
Do.	12.51	5.05	12			
Do.	12.51	2.85	15-16			
Dallas	11.69	2.90	30			
Dardanelle	11.73	3.00	30			
Forrest	11.40	3.00	12-13			
Fulton	11.73	3.10	13			
Gaines Landing	11.73	3.35	12			
Helena a.	11.73	3.97	13			
Do.	11.73	3.58	16			
Do.	11.73	3.18	16			
Hope	11.40	4.05	12			
Hot Springs	11.40	2.52	12			
Little Rock	11.40	2.79	12-13			
Lonoke	11.40	3.50	12			
Madding	11.40	7.06	12			
Do.	11.40	3.63	15			
New Gascony	11.40	6.66	12-13			
Do.	11.40	3.53	15-16			
Newport a.	11.40	3.50	30-31			
Oceola	11.40	3.32	12-13			
Do.	11.40	5.06	30-31			
Pine Bluff	11.40	6.60	12-13			
Do.	11.40	3.12	16			
Russellville	11.40	2.50	12			
Searcy	11.40	5.33	12-13			
Stuttgart	11.40	5.61	12-13			
Do.	11.40	2.76	16			
Texarkana	11.40	2.70	11-12			
Washington b.	11.40	4.05	12-13			
<i>California.</i>						
Anderson	11.40	3.00	25			
Arcata	11.40	2.80	22			
Berkeley	11.40	2.96	2			
Boulder Creek	11.40	21.11				
Calistoga	11.40	10.79				
Cusco	11.40	11.20				
Cloverdale	11.40	16.77	10.10	21-24		
Colfax	11.40	16.95				
Delta	11.40	19.51				
Duarte	11.40	2.92	23-24			
Dunsmuir	11.40	14.03				
Edmonton	11.40	24.98	7.08	2-3		
Do.	11.40	2.74	21			
Do.	11.40	11.71	23-25			

Table of excessive precipitation—Continued.

State and station.	Monthly rainfall to inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
<i>California—Continued.</i>	<i>Inches.</i>	<i>Inches.</i>		<i>Inches.</i>	<i>A. M.</i>	
Eldorado	10.33					
Emigrant Gap	19.97					
Eureka	15.15	2.73	22-23			
Felton	10.96	6.44	22-24			
Fouts Springs	15.76	2.65	1			
Georgetown		4.14	3			
Do.		2.78	24			
Glen Ellen	14.96					
Glendora	11.22	2.63	24			
Grass Valley a.		2.57	3			
Do.		2.67	24			
Grass Valley b.	11.91	3.06	3			
Do.		3.28	24			
Hydesville	10.66	6.00	22-23			
Iowa Hill	11.88	3.00	3			
Jolon		3.20	23			
Kennedy Gold Mine		3.28	3			
Laurel	22.66					
Los Gatos a.	14.88					
Los Gatos b.	14.95	2.85	3			
Do.		8.46	23-24			
Middletown	14.77	7.57	23-24			
Napa City b.		3.41	3			
Nevada City	14.19	3.10	3			
Do.		4.10	24			
New Almaden	13.90					
Nordhoff		5.17	23-25			
Palermo		2.75	2-3			
Placerville a.	15.48					
Placerville b.	10.53	2.94	3			
Redding a.	14.27					
Redding b.	10.79					
Rumsey	11.37					
Santa Barbara a.		3.62	24			
Santa Cruz b.		3.00	23			
Saticoy		3.10	23			
Shasta	17.46	8.75	22-24			
Sims	26.92					
Sonoma		2.68	24			
Sutter Creek		2.52	3			
Tehama	12.96					
Towles	17.33					
Upper Mattole	24.48	16.93	22-24			
Do.		3.39	27			
Winters	13.68					
<i>Colorado.</i>						
Pikes Peak	20.51	7.39	5-6			
Do.		3.38	15-16			
Do.		2.55	20-21			
<i>Florida.</i>						
Jupiter		3.00	11			
Tallahassee		3.40	17			
<i>Indian Territory.</i>						
Lehigh		3.25	6			
South McAlester		2.55	11-12			
<i>Kentucky.</i>						
Bowling Green		3.05	13			
Do.		2.80	30-31			
Franklin		2.60	12-13			
Matlock		3.22	12-13			
Springfield		2.50	12-13			
<i>Louisiana.</i>						
Davis		3.00	31			
Farmerville		2.58	31			
Homer		3.75	12	1.02	6 30	6
Monroe		2.91	12-13			
Do.		3.28	31			
North Louisiana Experiment Station		3.42	13			
Plain Dealing		4.50	12			
Do.		4.00	16			
Shell Beach		4.70	31			
<i>Mississippi.</i>						
Batesville		2.80	12-13			
Greenville		2.64	12-13			
Washington				1.01	1 00	7
Water Valley		3.24	13			
<i>Missouri.</i>						
Carthage		2.69	6			
Gayoso		3.08	30-31			
<i>Oklahoma Territory.</i>						
Oklahoma City		2.78	5-6			
Sac and Fox Agency		3.20	6			
<i>Oregon.</i>						
Astoria	10.25					
Bandon	17.17	6.32	21-22			
Eugene		2.70	21			
Gardiner	14.42	6.07	20-21			
Glenora	17.83	2.70	21			
Do.		4.75	26			
Hood River (near)	10.94					
Langlois	13.56					
<i>Tennessee.</i>						
Andersonville		2.60	19			
Clarksville		3.24	13			
Covington b.	12.96					
Jackson	11.91	4.00	13			
Do.		4.00	30			
Memphis	11.95	4.50	12-13			
Savannah		3.25	16			

Table of excessive precipitation—Continued.

State and station.	Monthly rainfall 10 inches, or more.	Rainfall 2.50 inches, or more, in 24 hours.		Rainfall of 1 inch, or more, in one hour.		
		Amt.	Day.	Amt.	Time.	Day.
<i>Tennessee—Continued.</i>						
Waynesboro		<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	<i>A. M.</i>	
			2.80	14		
<i>Texas.</i>						
Brenham			2.75	6		
Camp Pena Colorado			2.50	12		
College Station	11-03		3.55	12		
Corpus Canab			2.58	30-31		
Duval			2.60	12		
Gainesville			2.50	12		
Mountain Spring			3.86	11-12		
New Braunfels			3.75	12-13		
Palestine	11-04		2.76	6		
Do.			3.24	30-31		
Paris			2.73	12		
Round Rock			3.08	11-12		
Sulphur Springs			3.06	6		
Temple			2.50	30		
<i>Washington.</i>						
East Clallam	10-46					
Neah Bay	12-02					
Madrona			3.00	20-21		
Olympia	10-76		5.98	20-23		

Received too late for publication in November, 1892.

<i>California.</i>						
Fouts Springs	10-25					
<i>Delaware.</i>						
Mountain View		3.35	28			
<i>Maryland.</i>						
Seaford		3.13	15			
<i>New York.</i>						
Denton		2.60	15			
<i>Washington.</i>						
Central Park, New York City		3.19	15-16			
Vashon		2.50	17			

MAXIMUM RAINFALL IN ONE HOUR OR LESS.

The following table is a record of the heaviest rainfall during December, 1892, for periods of five and ten minutes and one hour, as reported by regular stations of the Weather Bureau furnished with self-registering gauges:

Maximum rainfall in one hour or less.

Station.	Maximum fall in—					
	5 min.	Date.	10 min.	Date.	1 hour.	Date.
Atlanta, Ga.	Inch.		Inch.		Inch.	
Bismarck, N. Dak.	0.09	19	0.14	19	0.45	19
Boston, Mass.						
Buffalo, N. Y.						
Cincinnati, Ohio	0.05	31	0.06	31	0.15	31
Chicago, Ill.	0.08	13	0.10	13	0.37	13
Cleveland, Ohio						
Denver, Colo.						
Detroit, Mich.						
Dodge City, Kans.						
Duluth, Minn.						
Eastport, Me.	0.01	8	0.02	8	0.13	8
Galveston, Tex.	0.17	7	0.23	7	0.45	7
Indianapolis, Ind.						
Jacksonville, Fla.	0.10	18, 26	0.15	18, 26	0.51	18
Jupiter, Fla.	0.25	11	0.40	11	0.95	11
Kansas City, Mo.						
Key West, Fla.	0.12	27	0.14	27	0.30	27
Marquette, Mich.						
Memphis, Tenn.	0.12	8	0.17	8	0.25	8
Milwaukee, Wis.						
New Orleans, La.						
New York, N. Y.	0.11	8	0.17	8	0.25	8
Norfolk, Va.						
Omaha, Nebr.						
Philadelphia, Pa.	0.07	8	0.10	8	0.17	8
Philadelphia Water Works						
Pittsburg, Pa.						
Portland, Oregon	0.04	26	0.07	26	0.17	26
Saint Louis, Mo.	0.13	6	0.20	6	0.52	6
Saint Paul, Minn.						
Salt Lake City, Utah	0.02	25	0.04	25	0.17	25
San Diego, Cal.	0.01	24	0.02	24	0.10	24
San Francisco, Cal.						
Savannah, Ga.	0.22	17	0.32	8	0.71	17
Tampa, Fla.	0.30	26	0.50	26	0.95	26
Washington, D. C.	0.05	13	0.06	13	0.26	13
Wilmington, N. C.	0.04	14	0.05	14	0.10	14

* Record incomplete on account of snow.
† Self-register out of order.

The following tables show the number of years for which monthly precipitation to equal or exceed 10.00 inches, daily precipitation to equal or exceed 2.50 inches, and hourly precipitation to equal or exceed 1.00 inch has been reported in the several states and territories for December during the last 23 years:

Excessive monthly precipitation.

State.	No. years noted.	State.	No. years noted.
Washington	17	Connecticut	0
California	14	The Dakotas	0
Oregon	11	Delaware	0
Texas	8	District of Columbia	0
North Carolina	6	Idaho	0
Louisiana	6	Illinois	0
Florida	4	Indian Territory	0
Mississippi	3	Iowa	0
Arkansas	3	Kansas	0
Georgia	3	Maine	0
New York	3	Maryland	0
Tennessee	2	Minnesota	0
Alabama	2	Montana	0
Arizona	1	Nebraska	0
Indiana	1	New Mexico	0
Kentucky	1	Ohio	0
Massachusetts	1	Pennsylvania	0
Michigan	1	Rhode Island	0
Missouri	1	South Carolina	0
Nevada	1	Utah	0
New Hampshire	1	Vermont	0
New Jersey	1	West Virginia	0
Virginia	1	Wisconsin	0
Colorado	1	Wyoming	0

Excessive daily precipitation (24 hours).

State.	No. years noted.	State.	No. years noted.
California	15	Michigan	3
Texas	15	New Jersey	3
Louisiana	15	Missouri	3
North Carolina	11	Arizona	2
Georgia	10	Iowa	2
Alabama	10	District of Columbia	2
Florida	10	Connecticut	1
Oregon	10	Delaware	1
Tennessee	10	New Hampshire	1
Mississippi	10	Utah	1
Virginia	8	Vermont	1
Washington	8	Colorado	1
Indiana	7	Indian Territory	1
Illinois	6	The Dakotas	0
Ohio	6	Idaho	0
Pennsylvania	6	Minnesota	0
South Carolina	6	Montana	0
Arkansas	6	Nebraska	0
Kentucky	5	Nevada	0
Maryland	5	New Mexico	0
New York	5	Rhode Island	0
Massachusetts	4	West Virginia	0
Kansas	4	Wisconsin	0
Maine	3	Wyoming	0

Excessive hourly precipitation.

State.	No. years noted.	State.	No. years noted.
Texas	7	Delaware	0
California	6	District of Columbia	0
Louisiana	4	Idaho	0
Tennessee	4	Indian Territory	0
Mississippi	3	Iowa	0
Illinois	3	Kentucky	0
Indiana	3	Maryland	0
Pennsylvania	3	Minnesota	0
Alabama	3	Montana	0
Arkansas	3	Nebraska	0
Michigan	2	Nevada	0
Georgia	1	New Hampshire	0
Kansas	1	New Jersey	0
Massachusetts	1	New Mexico	0
Florida	1	New York	0
Maine	1	North Carolina	0
Missouri	1	Ohio	0
Oregon	1	Rhode Island	0
Virginia	1	South Carolina	0
Washington	1	The Dakotas	0
Wisconsin	1	Utah	0
Arizona	0	Vermont	0
Colorado	0	West Virginia	0
Connecticut	0	Wyoming	0

The following tables give exceptionally heavy monthly, daily, and hourly precipitation reported for December during the last 23 years:

Monthly.

Station and state.	Am't.	Year.	Station and state.	Am't.	Year.
	Inches.			Inches.	
San Andreas, Cal.....	51.05	1871	Georgetown, Cal.....	22.94	1889
Pilarcito, Cal.....	41.87	1871	Grass Valley, Cal.....	22.60	1888
Felton, Cal.....	34.95	1889	Laurel, Cal.....	22.66	1892
Mount Hamilton, Cal.....	33.84	1884	Neah Bay, Wash.....	22.57	1887
Reeds Camp, Cal.....	32.07	1880	Do.....	22.09	1890
Laurel, Cal.....	31.79	1889	Vacaville, Cal.....	21.85	1880
Emigrant Gap, Cal.....	31.20	1884	Colfax, Cal.....	21.85	1889
Neah Bay, Wash.....	30.70	1886	Pysht, Wash.....	21.61	1886
Upper Mattole, Cal.....	29.36	1889	Fort Stevens, Oregon.....	21.27	1880
Mount Saint Helena, Cal.....	28.91	1880	American Hill, Cal.....	21.22	1889
Summit, Cal.....	28.88	1871	Boulder Creek, Cal.....	21.11	1892
Cisco, Cal.....	28.30	1871	Grass Valley, Cal.....	21.08	1889
Sima, Cal.....	26.92	1892	Iowa Hill, Cal.....	21.04	1889
Crescent City, Cal.....	26.26	1885	San Rafael, Cal.....	20.96	1884
Tatoosh Island, Wash.....	25.84	1886	Emigrant Gap, Cal.....	20.85	1889
Delta, Cal.....	25.83	1889	Los Gatos, Cal.....	20.73	1889
Cisco, Cal.....	25.57	1889	Crescent City, Cal.....	20.58	1889
Do.....	25.05	1884	Dunsmuir, Cal.....	20.58	1889
Edmonton, Cal.....	24.98	1892	Healdsburg, Cal.....	20.42	1871
Upper Mattole, Cal.....	24.48	1892	Point Pleasant, La.....	20.39	1884
Mumford Hill, Cal.....	24.34	1880	Santa Cruz, Cal.....	20.38	1889
Neah Bay, Wash.....	23.91	1891	Portland, Oregon.....	20.14	1882
Colfax, Cal.....	23.60	1884	Tatoosh Island, Wash.....	20.08	1891
Neah Bay, Wash.....	23.22	1880	Cathlamet, Wash.....	20.00	1875

Daily (24 hours).

Station and state.	Amount.	Date.	Station and state.	Amount.	Date.
	Inches.			Inches.	
Upper Mattole, Cal.....	16.93	22-24, 1892	Minden, La.....	6.02	23, 1891
Point Pleasant, La.....	13.50	19, 1882	Fayetteville, N. C.....	6.00	9-10, 1878
Monroe, La.....	12.15	29-30, 1884	Do.....	6.00	20-21, 1878
Edmonton, Cal.....	11.71	23-25, 1892	Clarksville, Tex.....	6.00	31-Jan. 1,
San Rafael, Cal.....	11.45	17-21, 1884			1874-75
Mount Ida, Ark.....	10.35	26-30, 1884	Hydesville, Cal.....	6.00	22-23, 1892
Cloverdale, Cal.....	10.10	23-24, 1892	Olympia, Wash.....	5.98	20-22, 1892
Mount St. Helena, Cal.....	9.04	23-24, 1880	Hallettsville, Tex.....	5.93	11-12, 1891
Shasta, Cal.....	8.75	22-24, 1892	Mount St. Helena, Cal.....	5.73	19-20, 1880
Clarksville, Tex.....	8.50	29-30, 1874	Louisville, Ill.....	5.70	3, 1873
Do.....	8.50	28-29, 1876	New Ulm, Tex.....	5.62	3, 1875
Yaquina L. H., Oregon.....	8.47	5-6, 1887	Stuttgart, Ark.....	5.61	12-13, 1892
Los Gatos, Cal.....	8.46	23-24, 1892	Neah Bay, Wash.....	5.45	16-17, 1887
Point Pleasant, La.....	8.03	28-30, 1884	Fort Barrancas, Fla.....	5.43	5, 1879
College Station, Tex.....	7.78	12-14, 1891	Merritts Island, Fla.....	5.39	17, 1888
Portland, Oregon.....	7.66	12-13, 1882	Fort Barrancas, Fla.....	5.36	3-4, 1877
Middletown, Cal.....	7.57	23-24, 1892	Searcy, Ark.....	5.33	12-13, 1892
Pikes Peak, Colo.....	7.39	5-6, 1892	Fort Barrancas, Fla.....	5.32	20, 1881
Edmonton, Cal.....	7.08	2-3, 1892	Austin, Tex.....	5.31	11-12, 1891
Madding, Ark.....	7.06	12, 1892	Highlands, N. C.....	5.30	26, 1881
Point Pleasant, La.....	7.02	8-9, 1878	Titusville, Fla.....	5.28	17, 1888
New Gascon, Ark.....	6.66	12-13, 1892	Trinity, Ala.....	5.20	4, 1887
Mount St. Helena, Cal.....	6.65	2-3, 1880	Nordhoff, Cal.....	5.17	23-25, 1892
Fort Gaston, Cal.....	6.60	24-25, 1883	Oacola, Ark.....	5.06	30-31, 1892
Pine Bluff, Ark.....	6.60	12-13, 1892	Camden, Ark. (b).....	5.05	12, 1892
Fouts Springs, Cal.....	6.44	22-24, 1892	Vicksburg, Miss.....	5.05	18-19, 1872
Mico, Fla.....	6.33	24, 1888	Red Bluff, Cal.....	5.04	19, 1879
Bandon, Oregon.....	6.32	21-22, 1892	Boyd's Corners, N. Y.....	5.02	11, 1878
Fort Meade, Fla.....	6.20	17, 1888	Point Pleasant, La.....	5.01	14, 1884
Farmerville, La.....	6.15	5, 1890	Ellsworth, N. C.....	5.00	1-2, 1880
Gardiner, Oregon.....	6.07	20-21, 1892	Melissa, Tex.....	5.00	27-28, 1877

One hour and less.

Station and state.	Amount.	Time.	Date.
	Inches.	A. M.	
Tampa, Fla.....	0.30	0 05	26, 1892
New Orleans, La.....	0.30	0 05	5, 1890
Jupiter, Fla.....	0.25	0 05	11, 1892
Norfolk, Va.....	0.25	0 05	4, 1891
Savannah, Ga.....	0.25	0 05	8, 1890
Galveston, Tex.....	0.20	0 05	24, 1890
Tampa, Fla.....	0.50	0 10	26, 1892
Galveston, Tex.....	1.36	0 20	28, 1871
Wellaboro, Pa.....	1.20	0 20	7, 1884
Winnebago, Ill.....	1.00	0 20	21, 1889

snow (in inches and tenths).

Chart V shows the depth of snowfall reported for the month. A heavy fall of snow was reported in Utah on the 5th. On the 6th and 7th heavy snow fell in eastern and central Kansas and central Iowa. A heavy snowstorm visited eastern Kansas and parts of Missouri and Iowa on the 13th. A snow blockade was reported near Dodge City, Kans., on the 19th

and 20th. From the 20th to the 23d heavy snow fell in the north Pacific coast states, blockading railroads. At Olympia, Wash., and Portland, Oregon, about 2 feet of snow fell, and at Port Angeles, Wash., a depth of 12.4 inches was reported.

The evening of the 26th a sleet and snow storm set in over the south Atlantic and east Gulf states and northern Florida. During the 27th and 28th snow fell to a depth of 9.5 at Raleigh, N. C., and from the 26th to the 28th a depth of 19 inches, the heaviest fall since 1857, was noted at Norfolk, Va. At points in northern Florida the snow of the 27th was reported the first since 1857.

The heaviest snowfall for the month, 201, was noted at Pikes Peak, Colo. 40 to 60 fell at points in the mountains of Colorado. 52 fell at Olympia, Wash. At Calumet, Mich., Eden Center, N. Y., and Hood River, Oregon, the monthly snowfall exceeded 40. 20 to 30 fell in extreme northern New England, central New York, north Lower Michigan, northern Upper Michigan, in the Yellowstone Park, Wyo., and over a great part of Washington; over a great part of the interior of New England, New York, and Michigan, in an area extending from Upper Michigan and northern Lower Michigan to northwestern Texas, and generally over the Rocky Mountain and middle and northern plateau regions the monthly snowfall was 10 to 20.

DEPTH OF SNOW ON GROUND ON THE 15TH AND AT THE CLOSE OF THE MONTH.

Chart VI shows the depth of snow reported on the ground on the 15th. In the mountains of northeastern California and western Nevada a depth of 20 to 40 was noted. In Upper Michigan, the interior of Wisconsin, northeastern North Dakota, and in areas in the middle Rocky Mountain region the depth was 10 to 20. Over northern New England and northeastern New York, from Upper Michigan over Kansas, and in the middle and northern Rocky Mountain regions a depth of 5 to 10 was reported.

Chart VII shows the depth of snow reported on the ground at the close of the month. In the northern Rocky Mountain region and northeastern Washington a depth of 20 to 30 was reported. At points in northern New England, northern and western New York, northern Lower Michigan, Upper Michigan, the interior of Wisconsin, in an area extending over central Iowa and central Kansas, and at points in the northern and middle Rocky Mountain regions, northeastern California, and western Nevada 10 or more was noted; and a depth of 5 or more was reported in south-central Virginia, northern North Carolina, in an area extending from northern Lower Michigan and Upper Michigan over eastern Kansas, and generally in the northern and middle Rocky Mountain regions and the extreme northwest.

Monthly snowfall of 10 inches, or more, was reported as follows, and in states and territories where the maximum depth was below that amount the station reporting the greatest is given:

Alabama.—Maysville, 2. *Arizona.*—Chiricahua Mountains, 12.8; Flagstaff, 11. *Arkansas.*—Conway, 6.5. *California.*—Summit, 95; Cisco, 60; Boca, 28; Emigrant Gap, 24; Truckee, 23; Edmonton, 16.5; Sisson, 15; Dunsmuir, 14. *Colorado.*—Pikes Peak, 201.3; Climax, 66; Breckenridge, 46.5; Cumbres, 40; Greenhorn, 36.5; Dillon, 32; Gold Hill, 31; Smoky Hill Mine, 26; Husted, 22.5; Castle Rock, 19; Denver, 17.8; Glen Eyrie and Pagoda (near), 17; Villa Grove, 16.5; Pueblo, 16; Ward District, 15.2; Como (near), 15; Bennet and River Bend, 13; San Luis, 12.9; Rico, 12.1; Alma, 12; Thon, 11.2; Arboles, Dumont, and Watkins, 11.

Connecticut.—Storrs, 6. *Delaware.*—Dover, 5. *District of Columbia.*—Washington, 5.5. *Florida.*—Jacksonville, Moseley Hall, Pensacola, and Tallahassee, trace. *Georgia.*—Elberton, 5.5. *Idaho.*—Kootenai, 46.5; Henrys Lake, 27; Idaho Falls,

17; Moscow, 15; Garden Valley, 10. *Illinois*.—Winnebago, 14.5; Rockford, 10.6. *Indiana*.—Mauzy, 6.2. *Indian Ter.*—Fort Supply, 15.5. *Iowa*.—Sydney, 29; College Springs, 23.5; Mechanicsville, 20.2; Clarinda, 20; Winterset, 18.5; Blakeville and Eldora, 18; Greenfield, 17.2; Atlantic and Grundy Center, 17; Hampton and Tipton, 16; Glenwood, 14.8; Belle Plaine, 14.5; Davenport, 14.3; Corning (b), 14; Indianola, 13.6; Ames (near), 13; Independence, 12.8; Des Moines and Eagle Grove, 12.5; Maxon, 12.2; Denison, Logan, and Williams, 12; Charles City, Cresco, and Osage, 11.5; Carroll, 11.2; Clinton, Dubuque, Hopkinton, and Iowa Falls, 11; Marshall and Vinton, 10.5; Ames (c), Cedar Falls, Fort Madison, and Maquoketa, 10.

Kansas.—Abilene, 29.6; Salina, 24.8; Wakefield, 24; Fort Riley, 23.4; Emporia, 20.5; Yates Center, 18.9; Lebo, 18.8; Elco and Kiowa, 18.5; Pauline, 17.5; Hutchinson, 16.8; Manhattan (c), 16.5; Havensville and Marion, 15.5; Liberal, 15; Horton, 14.5; Manhattan (a), 14; Manhattan (b) and Wichita, 13.8; Kellogg, 13.5; Gove City, 13.2; Dodge City, 13; Topeka, 12.9; Greensburg, 12.5; Minneapolis, 12.1; Concordia, Grenola, and Sterling, 12; Leavenworth, 11.6; Bucklin, 11; Oberlin, 10.8; Englewood, 10.5; Downs, 10. *Kentucky*.—Pellville, 8. *Louisiana*.—Monroe and Shreveport, trace.

Maine.—Houlton, 7.7. *Maryland*.—Darlington, 5.5. *Massachusetts*.—Monroe, 16; Cambridge (a), 14. *Michigan*.—Calumet, 44; Berrien Springs (a), 40.5; Harbor Springs, 35; Bear Lake, 34.8; Sault Ste. Marie, 33.7; Gaylord, 32; Hart, 29.5; Weldon Creek, 25; Charlevoix, 23; Allegan, 20; Boon, 18.5; Ivan and Saint Ignace, 16.5; Cheboygan, 15.8; Vandalia, 15.7; McMillan, 15.5; Benton Harbor, 14.5; Marquette, 14; Caldwell, 13; Manistee, 12.5; Grand Haven, 10.8; Parkville, 10. *Minnesota*.—Sheldon, 12.9; Wabasha, 11; Grand Meadow and Saint Charles, 10.

Mississippi.—Pontotoc, 3.5. *Missouri*.—Langdon, 19.8; Galt, 18; Oregon (b), 17; Oregon (a), 15.6; Pickering, 11.6; Bethany and Mound City, 11; Liberty, 10.8; Conception, 10.6; Platte River, 10.2. *Montana*.—Cokedale, 25; Elk Park, 20; Virginia City, 19; Fort Missoula, 18.5; Camp Poplar River, 18.2; Fort Logan, 18; Havre, 13.6; Bozeman, 13.2; Glendive, 13; Hogan, 12. *Nebraska*.—Plattsmouth, 22.5; Syracuse, 21.4; Table Rock, 19.5; Turlington, 19.1; Nebraska City, 17; Weeping Water, 16.5; Omaha, 16.4; Bookwalter, 16; De Soto, 12.9; Beatrice and David City, 12; Lincoln, 11.3; York, 11.2; Fairbury, 11.

Nevada.—Stofel, 19.5; Belmont, 14; Austin, 12.5; Empire Ranch, 11.8. *New Hampshire*.—Berlin Mills, 18.5; Lancaster, 17; Bethlehem and West Milan, 16; Stratford, 11. *New Jersey*.—Beverly, 8.2. *New Mexico*.—Fort Stanton, 12.7; Monero, 12.5; Halls Peak, 11.3; Chama, 11.2; Coolidge, 10. *New York*.—Eden Center, 46.5; Baldwinville, 30; Le Roy, 26; Number Four, 25.6; Turin, 21.8; Rochester, 19.2; Amersand, 18.5; Oswego, 17.4; Malone, 17.2; Ogdensburg, 16.5; Watertown, 16; Humphrey, 14.2; Buffalo, 12.9; Brookfield, 12; Potsdam, 11; Utica, 10.8; Lowville, 10.

North Carolina.—Pittsboro, 14; Littleton, Southern Pines, and Roxboro, 12; Chapel Hill and Louisburg, 11; Weldon, 10. *North Dakota*.—Fort Buford, 15.6. *Ohio*.—Harbor, 20.7; Wheeler, 18; Hillhouse, 12.7. *Oklahoma*.—Gate City, 12.5. *Oregon*.—Hood River (near), 41.5; Vernonia, 34.2; Glenora, 34; The Dalles, 32.5; Portland and Siskiyou, 29; East Portland, 25; Joseph, 21; Lafayette, 20; Sheridan, 18; Arlington, 16; Corvallis (near), 15.5; Albany (a) and Newberg, 15; Corvallis (a), McMinnville (b), and Monmouth, 14; Astoria, Corvallis (b), McMinnville (a), Salem (a), and Springfield, 13; Junction City, 11; Pendleton, 10.

Pennsylvania.—Saegerstown, 22.7; Blue Knob, 16.5; Stoyestown, 14; Somerset, 12.5; Erie, 10.5. *Rhode Island*.—Kingston (b), 10.2. *South Carolina*.—Nichols, 4.5. *South Dakota*.—Spearfish, 15.5; Oelrichs, 11.5; Fort Meade, 10.2. *Ten-*

nessee.—Rugby and Springdale, 5. *Texas*.—Amarillo, 11.2; Ochiltree, 11. *Utah*.—Provo City, 23; Salt Lake City, 19.5; Stockton, 18; Levan, 15.5; Ogden (a), 13.2; Ogden (b), 12.5; Castle Rock, 11.1. *Vermont*.—Enosburg Falls, 22; Strafford, 15; Chelsea and Jacksonville, 12; Burlington, 10.

Virginia.—Norfolk, 18.6; Cape Henry and Emporia, 12; Clarksville, 11. *Washington*.—Olympia, 51.6; Pine Hill, 34.5; Madrone, 33; Fort Simcoe, 29.5; Chelan, 29; Waterville, 27; Chehalis, 22; Fort Spokane, 20.7; Aberdeen, 20.5; Spokane, 19.9; Tacoma, 19; Clyde, 17; Rosalia, 13.3; Seattle, 12.5; Port Angeles and Walla Walla, 12.4; Silver Creek, 12; Ferry, 10. *West Virginia*.—Pleasant Hill, 14; Grafton, 13; Bluefield and Kingwood, 12; Morgantown (b), 10.

Wisconsin.—Columbus, 19.1; Portage, 15; Hillsboro, 14; Sparta (b), 13.9; Viroqua, 13.5; Reedsburg, 13.2; Oconomowoc, 13; Black River Falls and Harvey, 12.8; Watertown, 12.5; Chippewa Falls, 11.5; Depere, 11.2; Baraboo, Cadiz, Crandon, and Medford (a), 11; Embarrass and Green Bay, 10.8; Oconto and Westfield, 10.5; Beaver Dam, 10.2; Eau Claire, La Crosse, and Meadow Valley, 10. *Wyoming*.—Fort Yellowstone, 22; Evanston, 18; Lander, 16; Camp Pilot Butte and Sundance, 14; Fort Washakie, 10.4.

The first snow of the season was reported as follows: 2d, Chelan, Fort Spokane, and Waterville, Wash. 4th, Eldora, Iowa. 5th, Chiricahua Mountains, Holbrook, Natural Bridge, and Whipple Barracks, Ariz.; Independence and Keeler, Cal.; Phillipsburg, Kans.; Beatrice, Nebr.; Bloomfield, N. Mex. 6th, Sidney, Iowa; Morton, Syracuse, and Ulysses, Kans.; Springfield, Ky.; Rea, Mo.; David City, Franklin, and Syracuse, Nebr.; Albuquerque and Albert, N. Mex.; Hartley and Ochiltree, Tex.; Colfax and Moxee Valley, Wash.

7th, Cedar Falls, Glenwood, Marshall, and Mount Ayr, Iowa; Elk Falls, Kirwin, and Sedan, Kans.; Bethany, Lamar, Lamonte, Neosho, Stanberry, and Warrensburg, Mo.; Fremont, Genoa, Table Rock, Tekamah, and Weeping Water, Nebr.; Gallinas Spring, N. Mex.; Burnet, Guthrie, and Ponca, Okla. 8th, Hennepin and Palestine, Ill.; Maxon, Iowa; Fort Reno, Okla.; Elkton, S. Dak.; Pomeroy, Wash. 9th, Collinsville, Ill.; O'Neill, Nebr.; Abilene, Tex. 10th, Philo and White Hall, Ill.; Columbus, Kans.; Bowling Green and Matlock, Ky.

11th, Bisbee, Calabasas, Fort Grant, Fort Huachuca, Mount Huachuca, Payson, and Wilgus, Ariz.; Carrollton, Ky.; Fort Bayard, N. Mex.; Mangum, Okla.; Aurora and Gainesville, Tex. 12th, Mexico, Mo.; York, Nebr.; Embudo, La Luz, and Olio, N. Mex.; Silver Falls, Tex.; Clyde, Fort Simcoe, and Pine Hill, Wash. 13th, Fort Bowie, Ariz.; Logan, Iowa; Roby, Tex. 15th, Ewing, Nebr.; El Paso, Tex. 16th, Concordia and Fulton, Mo. 17th, Marshall, Mo.; Hillsboro, N. Mex.; Columbia, Kingston, London, and Rockwood, Tenn.; Fort Hancock, Tex.

18th, Union Springs and Walker Springs, Ala.; Nogales, Ariz.; Jefferson City, Mo.; Creighton, Nebr.; Rogersville, Tenn.; Burnet and Camp Pena Colorado, Tex. 19th, Florence and Maysville, Ala.; Camden, Ark.; Seaford, Del.; Ellsworth, Pana, and Peoria, Ill.; Middlesboro and Williamsburg, Ky.; Greenville, Pontotoc, University, and Water Valley, Miss.; New Palestine, Mo.; Asheville, N. C.; The Dalles and Portland, Oregon; Durham, Tex.; Aberdeen, Wash. 20th, Helena, Ark.; Catlettsburg, Ky.; Homer, La.; Taneytown, Md.; Imperial, Nebr.; Fort Sill, Okla.; Astoria, Oregon; Petersburg, Va.; Chehalis, Fort Townsend, and Vashon, Wash.; Hinton, W. Va.

21st, Shasta and Ukiah, Cal.; Albany, Oregon; Graham, Tex.; Fort Canby, Madrone, Seattle, and Tacoma, Wash.; Philippi and White Sulphur Springs, W. Va. 22d, Watseka, Ill.; Healdton, Ind. T. 23d, Albany, Ga. 25th, Gaines Landing, Ark.; Hawkinsville, Ga.; Coushatta, La.; Aberdeen and Agricultural College, Miss.; New Haven and Sarcocoxie, Mo.

26th, Auburn, Bermuda, Brewton, Claiborne, Gadsden, Healing Springs, Highland Home, Livingston, Lynn, Mobile, Montgomery, Tallassee, Tuscaloosa, and Warrior, Ala.; Fort Smith, Ark.; Pensacola, Fla.; Adairsville, Americus, Athens, Atlanta, Dahlonaga, Dublin, Forsyth, Lagrange, Marietta, Millen, Mill-edgeville, and Morgan, Ga.; Eufaula and Gwennedale, Ind. T.; Calhoun, Delhi, Monroe, and Shreveport, La.; Briers, Canton, Crystal Falls, Edwards, Fayette, Kosciusko, Louisville, Meridian, Moss Point, Palo Alto, Vaiden, Vicksburg, and Washington, Miss.; Bryson City, Chapel Hill, Fayetteville, Lenoir, Lillington, Littleton, Newbern, Oak Ridge, Raleigh, Smithfield, Soapstone Mount, Southport, and Wilmington, N. C.; Aiken, Camden, Cheraw, Effingham, Longshore, and Nichols, S. C.; Highland and Palestine, Tex.; Clarksville, Va. 27th, Jacksonville, Moseley Hall, and Tallahassee, Fla.; Augusta, Bainbridge, Canton, Cordele, Elberton, Fort Gaines, Hephzibah, Louisville, Piscola, Poulan, Point Peter, Savannah, and Thomasville, Ga.; Charlotte, Columbus, Douglas, Louisburg, Marion, Mount Holly, Roxbury, Salisbury, and Saxon, N. C.; Sac and Fox Agency, Okla.; Charleston, Columbia, Greenville, Saint Stephens, Simpsonville, Statesburg, Tillers Ferry, and Wateree, S. C.; Sulphur Springs, Tex.; Nottoway, Va. 30th, Anadarko, Okla. 31st, Menardville, Tex.

HAIL.

Description of the more severe hailstorms of the month is given under "Local storms." Hail was reported as follows: 3d, California and New Jersey. 5th, Arizona and California. 6th, Louisiana, Maryland, New York, and Texas. 7th, Illinois, Michigan, and South Carolina. 8th, New York, Pennsylvania, and West Virginia. 11th, Nevada and Texas. 12th, Arizona and Texas. 13th, Maryland, New Jersey, and Pennsylvania. 18th, Pennsylvania and Texas. 19th, Maryland and Mississippi. 20th, Pennsylvania. 21st, Mississippi. 25th, Colorado, Nevada, and Pennsylvania. 30th and 31st, Texas.

WINDS.

The prevailing winds for December, 1892, are shown on Chart II by arrows flying with the wind. In the middle Atlantic and New England states and the Missouri Valley the winds were generally from the northwest; in the south Atlantic states, over the Florida Peninsula, over the southern plateau region, and along the south Pacific coast, from northwest to northeast; in the east Gulf states, from northwest to north; in the west Gulf states, from north to east; in the lower lake region and on the northeast slope of the Rocky Mountains, from southwest to northwest; in the upper lake region, from southwest to west; in the extreme northwest and on the middle and southeast slopes of the Rocky Mountains, from west to north; in the upper Mississippi valley and on the California coast, from west to northwest; over the middle plateau region, from southeast to southwest; on the north Pacific coast, from east to southeast; in the Sacramento Valley, California, in the Ohio Valley and Tennessee, and over the northern plateau region, variable.

HIGH WINDS (in miles per hour).

Wind velocities of 50 miles, or more, per hour were reported at regular stations of the Weather Bureau as follows: 1st, 66, s., at Fort Canby, Wash. 2d, 56, s., at Fort Canby, Wash. 7th, 50, sw., at Chicago, Ill. 20th, 56, n., at Kittyhawk, N. C.; 54, ne., at Tatoosh Island, Wash. 21st, 84, e., at Tatoosh Island, Wash. 22d, 70, e., at Tatoosh Island, Wash.; 56, w., at Cheyenne, Wyo.; 52, se., at Fort Canby, Wash. 23d, 83, e., at Tatoosh Island, Wash.; 60, se., at San

SLEET.

Description of the more severe sleetstorms is given under "Local storms." Sleet was reported as follows: 1st, Maine, Montana, North Dakota, and Utah. 2d, Indiana. 3d, Connecticut, New Jersey, and Pennsylvania. 4th, Tennessee, Utah, and Wisconsin. 5th, Arizona, Nebraska, Utah, Washington, and Wisconsin. 6th, Connecticut, Iowa, Kansas, Maryland, Massachusetts, Nebraska, Ohio, Pennsylvania, Washington, and Wisconsin. 7th, Illinois, Iowa, Kansas, Massachusetts, Michigan, Missouri, Nebraska, and Wisconsin. 8th, North Dakota. 9th, Louisiana and Wisconsin. 10th, South Carolina.

11th, Arizona, Arkansas, Illinois, Missouri, Nebraska, and Texas. 12th, Arkansas, Kansas, Mississippi, Missouri, Ohio, Oklahoma, Oregon, and Tennessee. 13th, Arkansas, District of Columbia, Illinois, Iowa, Kansas, Maryland, Missouri, New Jersey, Ohio, Pennsylvania, Virginia, and Wisconsin. 14th, Maryland, Ohio, Pennsylvania, and Texas. 15th, Nebraska, Pennsylvania, Utah, and Washington. 16th, Illinois, Nebraska, Texas, Virginia, and West Virginia. 17th, Arkansas and Texas. 18th, Arizona, Arkansas, Maine, Montana, and Ohio. 19th, Arkansas, Maryland, Mississippi, North Carolina, Ohio, Pennsylvania, and Virginia. 20th, Arkansas, Mississippi, and Nebraska.

21st, Mississippi, Oklahoma, and Virginia. 22d, Nebraska, Oregon, and Pennsylvania. 23d, Kansas and Washington. 24th, Kansas, Nevada, and Pennsylvania. 25th, Arkansas, Illinois, Missouri, Nebraska, and Utah. 26th, Alabama, Arkansas, Florida, Georgia, Mississippi, Missouri, Montana, North Carolina, and South Carolina. 27th, Florida, Georgia, Kansas, and South Carolina. 28th, California, Georgia, Missouri, and New Mexico. 29th, Kentucky, Nebraska, Nevada, and Oklahoma. 30th, Arkansas, Illinois, Kentucky, Mississippi, and Missouri. 31st, District of Columbia, Kentucky, Missouri, Pennsylvania, and Virginia.

LOCAL STORMS.

1st-3d.—High wind and heavy rain prevailed in California; oranges were injured by wind, and rain caused floods throughout the greater part of the state.

5th.—At Salt Lake City, Utah, rain changed to snow in the early morning, and snow continued until about midnight; street car traffic was interrupted.

6th.—Tornadoes were reported in northeastern Texas and Arkansas. A tornado moved northeast east of Atlanta, Tex., between noon and 1 p. m., attended by heavy rain, small hail, thunder, and lightning. The storm had a whirling motion, and the path of destruction was 400 yards or less in width. One person was killed, 20 were injured, and 8 or ten small houses were destroyed. Two clouds, one from the northwest, the other from the southwest, united, and a black funnel-shaped cloud with a white center appeared. The track of the storm was swept clean, and the edges were well defined. Trees were twisted, and pieces of timber and articles from the wrecked houses were found on either side of the track. A

pot 150 pounds in weight was carried 200 yards and left in the track. Two boys were carried some distance, one being found 200 yards from the house. Cotton plants were stripped and many were torn up by the roots.

A tornado moved east about 6 miles northeast of Brenham, Tex., at 5.30 p. m., attended by light rain, hail, and vivid lightning. The length of the path of this tornado was about 10 miles. Articles were carried up. The center of the track was swept clean and debris was scattered on either side. The destruction to property was estimated at \$10,000. A funnel-shaped cloud moving northeast was observed near Queen City, Tex. The storm was attended by heavy rain and small hail, and was destructive in a path 100 to 300 yards in width. One man and a number of horses were killed. On the north side of the path articles were thrown southeast, on the south side northwest, and in the center in all directions.

A tornado moving northeast, with rain, hail, heavy thunder, and vivid lightning, was reported near Elkhart, Tex., at 11 a. m. The path of destruction was about 200 yards in width. Two persons were injured, large trees were uprooted, a few houses were destroyed, and a number of buildings were unroofed. A destructive tornado was reported in Nacogdoches county, Tex., about 2 p. m. The storm appears to have followed an irregular northeast course in a path about 10 miles in length and 300 yards in width, wrecking buildings, etc., in its path. At Palestine, Tex., a thunderstorm from the west, with heavy rain, began 9.20 a. m. and ended 10.20 a. m. Heavy rain again began 4.40 p. m. and ended 9.20 p. m.; 2.74 inches of rain fell in 12 hours. Considerable damage was caused by high wind six miles southeast of Palestine.

A severe storm visited Paragould, Ark., at 11 p. m. The path of the storm was about 200 yards in width. Many residences were moved from their foundations, trees were prostrated, and outbuildings wrecked. Estimated damage, \$20,000. Unusually heavy snow in central and eastern Kansas, eastern Nebraska, and central Iowa delayed trains.

12-13th.—Exceptionally heavy rain fell at Memphis, Tenn., with a thunderstorm the evening of the 12th; 4.50 inches of rain fell in 23 hours and 20 minutes, and 3.22 inches in 12 hours.

13th.—A destructive tornado was reported in Pike county, Miss., at 9.30 a. m.; 4 persons were reported killed, 7 injured, and a number of buildings were damaged. A destructive storm was reported at Clinton, La., at 8.30 a. m. A heavy sleet and snow storm prevailed over eastern Kansas and parts of western Iowa and western Missouri.

17th.—A severe "norther" prevailed at Los Angeles, Cal.

In the San Gabriel and Altadena sections oranges were damaged by wind.

19-20th.—Rain and high wind prevailed along the Virginia coast; several vessels were wrecked and one life was reported lost. Gales continued along the south Atlantic and Virginia coasts during the 20th.

20-25th.—Exceptionally severe storms prevailed over the Pacific coast states. Heavy snow prevailed over Washington from the 21st to the 23d, causing damage to property and interrupting railroad traffic. At Tatoosh Island, Wash., an east gale prevailed from the 21st to the 23d, reaching a maximum velocity of 83 miles per hour at 7.35 p. m., 23d. At Olympia, Wash., 2 feet of snow fell from the 20th to 22d. At Port Angeles, Wash., the depth of snow exceeded one foot. At Portland, Oregon, about 2 feet of snow fell on the 22d and 23d; this was the heaviest snowfall on record at that station. At Baker City, Oregon, rain, with a southeast gale, prevailed during the 24th; some damage was caused by wind.

At Roseburg, Oregon, the barometer fell to 29.02 at 5.15 p. m. of the 24th. Rain continued at intervals during the morning. A gale began at 5.50 p. m. and the wind reached an extreme velocity of 56 miles per hour, the highest velocity ever recorded at station. Considerable damage of a minor character was caused by wind in and about Roseburg. At Eureka, Cal., the wind increased to a gale by midnight of the 22d, and the barometer fell to 29.17 (reduced) the morning of the 24th. At 1.30 p. m. of the 24th the barometer began to rise and the wind shifted suddenly to southwest and blew with great force, causing much damage to buildings. Streams in the surrounding country were flooded by heavy rain.

At San Francisco, Cal., rain and high southeast winds continued from the 22d to the 24th; much damage was caused by wind. At Keeler, Cal., rain began the evening of the 23d and continued during the 24th. At 12.10 a. m. of the 25th the pressure decreased suddenly and the wind increased from 10 to 50 miles per hour, with gusts from the southwest. Mountain streams north of Keeler were flooded.

25-26th.—Heavy snow and high winds delayed trains in eastern Kansas.

26-27th.—Exceptionally heavy snow fell in Virginia and the south Atlantic and east Gulf states. High winds prevailed along the Virginia and south Atlantic coasts. On the 27th a bark went ashore and was wrecked on the "Quicksands," 35 miles west of Key West, Fla.; the crew was saved.

29-30th.—An unusually severe windstorm visited Flagstaff, Ariz.; buildings were blown down, houses were unroofed, and trees were uprooted.

INLAND NAVIGATION.

ICE IN RIVERS AND HARBORS AND CLOSING OF NAVIGATION.

The Kennebec River was closed by ice on the 17th.

The Connecticut River was closed by ice on the 24th.

Navigation closed on the upper Hudson River on the 22d. On the 25th the river was frozen at Albany, N. Y. Navigation on the Hudson between New York and Poughkeepsie closed on the 27th.

On the 24th navigation on the Delaware River between Burlington, N. J., and Philadelphia, Pa., was suspended. On the 28th the Delaware was frozen at Beverly, N. J.

The canal and Raritan River were frozen at New Brunswick, N. J., on the 24th.

On the 25th, at Philadelphia, Pa., the Schuylkill River was covered with thin ice, and ice was forming rapidly on the Delaware River. On the 28th many vessels were unable to enter or leave the port of Philadelphia on account of heavy ice in the river.

The Clarion River was frozen over at Clarion, Pa., on the 23d.

Floating ice was reported in the Susquehanna River at Towanda, Pa., on the 20th and 21st. The Susquehanna was frozen at Lock Haven, Pa., on the 22d.

Navigation on the Allegheny River closed at Freeport, Pa., on the 23d. Navigation on the Monongahela River closed at Greensboro, Pa., on the 26th.

The Patapsco River was frozen at Woodstock, Md., on the 25th.

From the 27th to the 29th the Pamlico River was closed by ice at Washington, N. C.

Floating ice was reported in the Roanoke River at Weldon, N. C., on the 27th and 28th. On the 29th the Roanoke was closed by ice at Littleton, N. C.

Floating ice was reported in the Pedee River, at Cheraw, S. C., from the 29th to 31st.

Floating ice was reported in the Oostenaula River at Resaca, Ga., on the 29th and 30th.

The Kanawha River frozen at Charleston, W. Va., on 26th.

The Monongahela River was frozen at Fairmont, W. Va., on the 30th.

Floating ice was reported in the Wabash River at Vincennes, Ind., from the 22d to 24th. The Wabash was frozen at Mount Carmel, Ill., on the 23d.

The Illinois River was closed at Havana, Ill., on the 20th. At Ottawa, Ill., ice passed out of the Illinois River on the 2d; the river was frozen on the 12th, and ice passed out on the 14th.

At Lansing, Mich., the Grand River opened on the 2d and closed on the 18th.

At Brunswick, Mo., the Grand River closed on the 20th.

Ohio River.—At Pittsburg, Pa., navigation to points on the Ohio River was suspended on account of ice on the 24th. On the 27th the rivers were frozen over at Pittsburg. On the 28th navigation to points on the Monongahela River above Pittsburg was entirely suspended for the first time since February, 1889. At Wheeling, W. Va., floating ice was reported on the 23d, and navigation closed on the 28th. Large quantities of floating ice were reported at Marietta, Ohio, from the 25th to 31st. At Portsmouth, Ohio, the first floating ice was observed on the 26th; from the 27th to 29th river full of floating ice; 30th, ice gorged at Sciota bar at 4 a. m.; river in front of city closed, and persons crossing on the ice; 31st, ferryboat broke channel to mouth of Sciota, causing ice in harbor to move; after running about 45 minutes ice again gorged.

At Cincinnati, Ohio, the river was full of floating ice on the 26th; 28th, nearly all the boats, except regular mail packets, tied up; 29th, navigation almost suspended on account of heavy ice. At Maysville, Ky., navigation was suspended on the 29th; on that date an ice gorge was reported two miles above Maysville. At Louisville, Ky., the river was partially frozen, and navigation, except for ferryboats, was suspended on the 27th; from the 28th to 31st the river was full of floating ice at Louisville. Floating ice was reported at Paducah, Ky., from the 27th to 31st. At Vevay, Ind., heavy ice was running on the 22d, and on the 26th navigation was suspended. At Golconda, Ill., floating ice was noted from the 26th to 29th. The river was reported clear of ice at Golconda on the 31st.

Mississippi River.—At Red Wing, Minn., ice ran out on the 1st; 10th, river frozen over; 19th, teams crossing on the ice. At Davenport, Iowa, the river was full of floating ice from the 4th to 22d; 23d, river frozen over; 28th, teams crossing on the ice. At Fort Madison, Iowa, the river was closed by ice on the 20th. The river was frozen over at Muscatine, Iowa, on the 22d. At Keokuk, Iowa, running ice was reported on the 10th; 19th, heavy ice running; 20th, gorge formed south of city, but broke at 4 p. m.; 22d, gorge formed in early morning, and river closed. At Hannibal, Mo., a gorge formed above the bridge on the 18th, closing navigation. At Saint Louis, Mo., the river was frozen and navigation closed on the 28th.

Missouri River.—At Santee Agency, Nebr., 11th, river frozen; 13th, river open; 18th, river frozen; 22d, teams crossing on the ice. At Sioux City, Iowa, considerable ice was running from the 7th to 9th; 19th, drift ice gorged in the channel one mile above the pontoon bridge. At Kansas City, Mo., floating ice was reported on the 10th, 11th, and 14th to 17th; on the 19th the river was frozen. At Saint Joseph, Mo., the river above the gauge was gorged with ice on the 9th; 13th, river below the gauge gorged; 26th, river blocked with ice. At Glasgow, Mo., teams were reported crossing on the ice on the 25th. At Langdon, Mo., the river was closed on the 18th. The river was closed at Oregon, Mo., on the 8th, and at New Haven, Mo., on the 26th.

Lake Ontario.—The last boat of the season left Oswego, N. Y., on the 17th. Navigation at Charlotte, N. Y., closed on the 24th.

Lake Erie.—Navigation closed on the Erie Canal on the 5th. The last boat of the season from Chicago arrived at Buffalo, N. Y., on the 19th. The harbor at Buffalo was closed by ice on the 24th. Navigation closed for the season at Toledo, Ohio, on the 9th, and at Cleveland, Ohio, on the 10th. At Sandusky, Ohio, the bay was frozen on the 21st.

At Detroit, Mich., navigation closed on the 18th.

Lake Huron.—The last departure for the season for Lake Huron ports was made from Port Huron, Mich., on the 11th. On the 15th a steamer passed down the Lake, closing navigation for the season at Port Huron. From the 18th to 22d the Black River was frozen, and small quantities of floating ice were reported in the Saint Clair River and Lake Huron. Heavy floating ice was observed in the Saint Clair River and Lake Huron on the 23d, 24th, and 25th. On the 26th the Saint Clair River was closed by ice below Marine City. On the 28th navigation on the Saint Clair River was closed for the season. Navigation was closed at Alpena, Mich., on the 11th, and on the 20th Thunder Bay River was frozen. Navigation closed at Cheboygan, Mich., on the 10th. On the 26th the Straits of Mackinac were frozen. The ice in the Straits broke up by the close of the month.

The last up-river boat of the season passed Sault Ste. Marie, Mich., on the 4th, and the last boat of the season passed down the river on the 6th, closing navigation. On the 23d the river was frozen at Sault Ste. Marie, and ferryboats were tied up.

Lake Michigan.—The last boat of the season left Green Bay, Wis., on the 1st. The last arrival of the season at Green Bay was reported on the 4th, and navigation closed on that date. The Fox River was frozen at Green Bay on the 10th. Navigation closed at Grand Haven, Mich., on the 5th. Heavy ice filled the harbor at Grand Haven on the 22d. Navigation closed at Milwaukee, Wis., on the 10th. From the 21st to 23d the harbor at Milwaukee was filled with ice, and from the 25th to 27th the harbor at that place was frozen over. Navigation closed at Chicago, Ill., on the 15th, and at Marquette, Mich., on the 6th.

STAGE OF WATER IN RIVERS.

The following table shows the danger-points at the various river stations; the highest and lowest stages for the month, with the dates of occurrence; and the monthly ranges:

Heights of rivers above low-water mark Dec., 1892, (in feet and tenths).

Stations.	Danger-point on gauge.	Highest water.		Lowest water.		Monthly range.
		Height.	Date.	Height.	Date.	
Red River.						
Shreveport, La.	39.9	28.9	29-31	11.1	1	17.8
Arkansas River.						
Fort Smith, Ark.	22.0	15.6	9	1.7	6	13.9
Little Rock, Ark.	23.0	19.9	16	6.6	6, 7	13.3
Missouri River.						
Fort Buford, N. Dak. *						
Bismarck, N. Dak.						
Pierre, S. Dak.	14.0					
Sioux City, Iowa *	18.7					
Omaha, Nebr.	18.0					
Kansas City, Mo. †	21.0	4.8	10	2.7	14	2.1
Mississippi River.						
Saint Paul, Minn. *	14.0					
La Crosse, Wis. *	11.8					
Dubuque, Iowa *	16.0					
Davenport, Iowa ?	15.0	3.9	22	0.1	15	3.8
Keokuk, Iowa ?	14.0	5.6	22	0.8	16	4.4
Hannibal, Mo.	17.0	3.0	29, 31	1.3	21	4.3
Saint Louis, Mo. †	30.0	5.6	11, 12	0.2	27	5.4
Cairo, Ill.	40.0	19.5	23	8.1	3	11.4
Memphis, Tenn.	33.0	14.8	25, 26	4.6	1.2	10.2
Vicksburg, Miss.	41.0	23.4	28, 30	3.1	1	20.3
New Orleans, La.	13.0	7.3	29, 31	3.1	1.4	4.2
Ohio River.						
Parkersburg, W. Va.	38.0	11.0	17	5.4	2	5.6
Cincinnati, Ohio	45.0	17.2	21	6.4	31	10.8
Louisville, Ky.	24.0	8.4	22	4.0	13	3.8
Cumberland River.						
Nashville, Tenn.	40.0	22.2	20, 21	3.1	12	19.1
Tennessee River.						
Chattanooga, Tenn.	33.0	9.5	22	2.6	13, 14	6.9
Knoxville, Tenn.	29.0					
Monongahela River.						
Pittsburg, Pa. †	29.0	10.5	15	1.4	25, 26	9.1

Heights of rivers—Continued.

Stations.	Danger-point gauge.	Highest water.		Lowest water.		Monthly range.
		Height.	Date.	Height.	Date.	
<i>Savannah River.</i>						
Augusta, Ga.	32.0	15.8	21	6.3	3	9.5
<i>Willamette River.</i>						
Portland, Oregon	15.0	11.2	29	0.8	15-18	10.4
<i>Susquehanna River.</i>						
Harrisburg, Pa.	17.0	4.2	12	0.9	24	3.3
<i>Alabama River.</i>						
Montgomery, Ala.	48.0	19.9	22	3.2	1.5	16.7
<i>James River.</i>						
Lynchburg, Va.	18.0	2.5	16, 17	0.2	13	2.3

* River frozen.
† For 27 days.

‡ For 17 days.
§ For 26 days.

¶ For 22 days.
‡ For 28 days.

FLOODS.

Heavy rain the latter part of the month caused destructive floods over the greater part of California. In Humboldt county streams were flooded, and considerable damage was caused to property along the Eel River. High water was general throughout the Sacramento and San Joaquin valleys. On the 17th the stage of water at Sacramento, 28.7 feet, was the highest ever reached at that place. The levee on the Yolo county side of the Sacramento broke in several places, and large tracts of cultivated land were submerged. The San Joaquin River was reported the highest ever known and large areas of bottom land were overflowed. Heavy rain also flooded streams in the southern part of the state, causing considerable damage of a minor character.

ATMOSPHERIC ELECTRICITY.

AURORAS.

Auroras were reported as follows: 4th, Winnebago, Ill.; Angola and Point Isabel, Ind.; Alta, Iowa; Orono, Me.; Cumberland, Darlington, and Fallston, Md.; Amherst, Concord, Fall River, Leicester, and Woods Holl, Mass.; Mottville, Mich.; Farmington, Fergus Falls, Maple Plain, Saint Olaf, and Sheldon, Minn.; Havre and Helena, Mont.; Moorestown, N. J.; Setauket, N. Y.; Bismarck, Napoleon, and Wild Rice, N. Dak.; Bangorville, New Berlin, Upper Sandusky, and Wooster, Ohio; Kingston and Narragansett Pier, R. I.; Pierre and Wolsey, S. Dak.; Dale Enterprise, Va.; Pine Hill, Wash. 5th, Nashua, N. H.; Woodbridge, N. Dak. 7th, Webster, S. Dak. 8th, Surface Creek, Colo. 11th, Cornish, Me.; Webster, S. Dak. 12th, Cresco, Iowa; Cornish, Gardiner, Houlton, and Orono, Me.; Sheldon, Minn.; Ashley, Bismarck, Grand Forks, Grand Rapids, Gallatin, Napoleon, Wild Rice, and Woodbridge, N. Dak.; Kimball and Webster, S. Dak.; Embarrass, Medford, and New Holstein, Wis. 13th, Cornish and Orono, Me.; Berlin Mills, N. H.; Fort Buford and Woodbridge, N. Dak. 14th, Fort Buford, N. Dak.; Phoenixville, Pa. 15th, Webster, S. Dak. 17th, Glendive, Mont.; Newark, N. J. 18th, Eastport, Me. 19th, Collegeville and Maple Plain, Minn.; Havre, Mont. 21st, Fort Buford, Gallatin, and Napoleon, N. Dak.; Medford, Wis. 22d, New Hartford, Conn.; Concord and Royalston, Mass.; Marquette, Mich.; Saint Olaf, Minn.; Nashua, N. H.; Number Four and Oswego, N. Y.; Fort Buford and Woodbridge, N. Dak.; Valley Junction, Wis. 23d, Concord, Mass.; Clear Lake, Collegeville, and Maple Plain, Minn.; Gallatin, Grand Forks, and Woodbridge, N. Dak.; Webster,

S. Dak.; Hartland, Vt.; Barron and Medford, Wis. 24th, Woodbridge, N. Dak.; Ellsworth, Ohio; Elkton and Webster, S. Dak. 25th, Collegeville, Minn.; Woodbridge, N. Dak. 26th, Collegeville and Wabasha, Minn.; Canton, Mo.; Berlin Mills, N. H.; Webster, S. Dak.

THUNDERSTORMS.

Description of the more severe thunderstorms reported for the month is given under "Local storms."

Thunderstorms were reported as follows: East of the Rocky Mountains they were reported in the greatest number of states, 14, on the 7th; in 10 on the 8th; in 11 on the 6th; in 6 on the 5th and 17th; in 5 on the 13th and 19th; in 4 on the 12th and 16th; in 3 on the 18th and 31st; in 2 on the 4th, 10th, 11th, 14th, 15th, 27th, and 30th; and in 1 on the 1st, 3d, 20th, and 23d. No thunderstorms were reported on the 2d, 9th, 21st, 22d, 24th, 25th, 28th, and 29th.

East of the Rocky Mountains thunderstorms were reported on the greatest number of dates, 12, in Texas; on 9 in Mississippi; on 7 in Louisiana; on 6 in South Carolina; on 5 in Arkansas, Georgia, and New York; on 4 in Alabama, Florida, Missouri, and Tennessee; on 3 in Indiana and Oklahoma; on 2 in Illinois, Indian Territory, Kansas, Kentucky, Michigan, New Jersey, Ohio, and West Virginia; and on 1 Maryland, Massachusetts, North Carolina, Pennsylvania, and Virginia.

West of the Rocky Mountains thunderstorms were reported in California on the 3d and 25th; in Nevada on the 24th; in Oregon on the 20th and 21st; and in Washington on the 4th, 7th, 8th, 16th, 17th, 20th to 24th, and 28th. In states and territories other than those named no thunderstorms were reported.

STATE WEATHER SERVICES.

[Temperature in degrees Fahrenheit; precipitation, including melted snow, in inches and hundredths.]

The following extracts and summaries are republished from reports for December, 1892, of the directors of the various state weather services:

ALABAMA.

Temperature.—The mean was 0.3 above the normal; maximum, 78, at Livingston, 4th; minimum, 9, at Florence, 27th; greatest monthly range, 69, at Florence; least monthly range, 54, at Maysville.

Precipitation.—The average was 0.36 above the normal; greatest monthly, 7.06, at Mobile; least monthly, 2.70, at Geneva. — P. H. Mell, Observer, Weather Bureau, Auburn, director.

ARIZONA.

Temperature.—The mean was 4.3 below the normal; maximum, 85, at Rancho del Pueblo, 13th and 14th; minimum, —5, at Flagstaff, 7th; greatest monthly range, 65, at Rancho del Pueblo; least monthly range, 45, at Oracle.

Precipitation.—The average was 0.93 below the normal; greatest monthly, 1.79, at Natural Bridge; least monthly, 0.00, at several stations.

Wind.—Prevailing direction, southwest. — J. C. Hayden, Observer, Weather Bureau, Tucson, director.

ARKANSAS.

Temperature.—The mean was 3.0 below the normal; maximum, 84, at New Gascony, 3d; minimum, —10, at Rogers, 26th; greatest monthly range, 80, at Rogers; least monthly range, 50, at Texarkana.

Precipitation.—The average was 4.34 above the normal; greatest monthly, 16.44, at Madding; least monthly, 3.17, at Keesees Ferry.

Wind.—Prevailing direction, north. — M. F. Locke, Commissioner of Agriculture, Little Rock, director; F. H. Clarke, Local Forecast Official, Weather Bureau, assistant.

CALIFORNIA.

Temperature.—Maximum, 88, at Duarte, 27th; minimum, 10, at Susanville,

14th; greatest monthly range, 60, at Bakersfield; least monthly range, 20, at Point Reyes.

Precipitation.—Greatest monthly, 24.98, at Edmonton; least monthly, 0.00, at Needles.

Wind.—Prevailing direction, west.—*J. A. Barwick, Observer, Weather Bureau, Sacramento, director.*

COLORADO.

Temperature.—Maximum, 78, at Las Animas, 1st; minimum, —25, at Cumbres, 7th, and at Breckenridge, 17th; greatest monthly range, 90, at Las Animas; least monthly range, 40, at Pikes Peak.

Precipitation.—Greatest monthly (20.51, at Pikes Peak), 4.64, at Breckenridge; least monthly, 0.05, at Kirk and Seibert.—*J. J. Gilligan, Observer, Weather Bureau, Denver, director.*

FLORIDA.

Temperature.—Maximum, 90, at Orange City, 20th; minimum, 23, at Pensacola, 27th; greatest monthly range, 64, at Orange City; least monthly range, 28, at Key West.

Precipitation.—Greatest monthly, 6.89, at Tallahassee; least monthly, 0.07, at Avon Park.

Wind.—Prevailing direction, northeast.—*E. R. Demain, Observer, Weather Bureau, Jacksonville, director.*

GEORGIA.

Temperature.—Maximum, 82, at Darien, 16th; minimum, 12, at Diamond, 28th and 29th; greatest monthly range, 65, at Diamond; least monthly range, 42, at Point Peter.

Precipitation.—Greatest monthly, 6.80, at Lincolnton; least monthly, 0.70, at Albany.

Wind.—Prevailing direction, northwest.—*Park Morrill, Local Forecast Official, Weather Bureau, Atlanta, director.*

IDAHO.

Temperature.—Maximum, 58, at Payette, 23d, and at Boise Barracks, 24th; minimum, —25, at Lake, 14th; greatest monthly range, 71, at Lake; least monthly range, 43, at Garden Valley.

Precipitation.—Greatest monthly, 5.85, at Kootenai; least monthly, 0.94, at Boise Barracks.—*J. H. Smith, Observer, Weather Bureau, Idaho Falls, director.*

ILLINOIS.

Temperature.—The mean was 2.9 below the normal; maximum, 72, at McLeansboro, 6th; minimum, —16, at Aurora, 27th, and at Dixon, 28th.

Precipitation.—The average was 0.76 below the normal; greatest monthly, 3.91, at Cairo; least monthly, trace, at Decatur.

Wind.—Prevailing direction, northwest.—*John Craig, Observer, Weather Bureau, Springfield, director.*

INDIANA.

Temperature.—The mean was 2.5 below the normal; maximum, 70, at Marengo, 6th; minimum, —11, at Lafayette, 26th; greatest monthly range, 72, at Lafayette; least monthly range, 45, at Angola.

Precipitation.—The average was 1.09 below the normal; greatest monthly, 3.00, at Marengo; least monthly, 0.75, at Ashboro.

Wind.—Prevailing direction, west.—*Prof. H. A. Huston, Lafayette, director; C. F. R. Wappenhans, Local Forecast Official, Weather Bureau, assistant.*

IOWA WEATHER AND CROP SERVICE.

Temperature.—The mean was 7.0 below the normal; maximum, 65, at Sidney, 4th; minimum, —29, at Ames, 20th; greatest monthly range, 83, at Atlantic; least monthly range, 54, at Hopkinton.

Precipitation.—The average was about normal; greatest monthly, 3.04, at College Springs; least monthly, 0.20, at Sioux City.

Wind.—Prevailing direction, northwest.—*J. R. Sage, Des Moines, director; G. M. Chappel, Local Forecast Official, Weather Bureau, assistant.*

KANSAS.

Temperature.—The mean was 7.4 below the normal; maximum, 74, at Sedan, 5th; minimum, —15, at Morse, 26th; greatest monthly range, 84, at Morse; least monthly range, 56, at La Crosse.

Precipitation.—The average was 0.69 above the normal; greatest monthly, 4.06, at Columbus; least monthly, trace, at Tribune.

Wind.—Prevailing direction, north.—*Prof. J. T. Lovewell, Topeka, director; T. B. Jennings, Observer, Weather Bureau, assistant.*

KENTUCKY.

Temperature.—The mean was 4.0 below the normal; maximum, 74, at Earlinton, 6th; minimum, —3, at Hendricks, 29th, and at Springfield, 28th; greatest monthly range, 71, at Springfield; least monthly range, 45, at Catlettsburg.

Precipitation.—The average was 0.17 above the normal; greatest monthly, 8.13, at Bowling Green; least monthly, 1.78, at Falmouth.

Wind.—Prevailing direction, north.—*Frank Burke, Local Forecast Official, Weather Bureau, Louisville, director.*

LOUISIANA.

Temperature.—Maximum, 90, at Winnsboro, 5th and 6th; minimum, 13, at Cameron, 27th; greatest monthly range, 73, at Cameron; least monthly range, 53, at Melville.

Precipitation.—Greatest monthly, 13.35, at Plain Dealing; least monthly, 2.40, at Amite.

Wind.—Prevailing direction, north.—*R. E. Kerkam, Local Forecast Official, Weather Bureau, New Orleans, director.*

MARYLAND.

Temperature.—Maximum, 68, at McDonogh, 8th; minimum, 6, at Woodstock, 29th, and at Boettcherville, 28th; greatest monthly range, 58, at Boettcherville, Great Falls, and Woodstock; least monthly range, 42, at Kirkwood, Del.

Precipitation.—Greatest monthly, 2.94, at Great Falls; least monthly, 1.37, at McDonogh.

Wind.—Prevailing direction, northwest.—*Dr. William B. Clark, Johns Hopkins University, Baltimore, director; Prof. Milton Whitney, Maryland Agricultural College, secretary and treasurer; C. P. Cronk, Observer, Weather Bureau, in charge.*

MICHIGAN.

Temperature.—The mean was 5.5 below the normal; maximum, 58, at Detroit and Benton Harbor, 7th; minimum, —14, at Calumet, 25th; greatest monthly range, 68, at Mottville; least monthly range, 33, at Charlevoix.

Precipitation.—The average was 0.42 below the normal; greatest monthly, 4.49, at Harbor Springs; least monthly, 0.56, at Gladwin.

Wind.—Prevailing direction, southwest.—*E. A. Evans, Local Forecast Official, Weather Bureau, Detroit, director.*

MINNESOTA.

Temperature.—Maximum, 55, at Ash Creek, 3d; minimum, —37, at Pokegama Falls, 26th; greatest monthly range, 73, at Ash Creek; least monthly range, 53, at Maple Plain.

Precipitation.—Greatest monthly, 1.29, at Sheldon; least monthly, trace, at Saint Vincent.

Wind.—Prevailing direction, northwest.—*J. H. Harmon, Observer, Weather Bureau, Minneapolis, director.*

MISSISSIPPI.

Temperature.—The mean was 0.1 below the normal; maximum, 85, at Hattiesburg, 5th; minimum, 10, at Brookhaven and Louisville, 27th; greatest monthly range, 69, at Brookhaven; least monthly range, 54, at Ship Island.

Precipitation.—The average was 0.89 above the normal; greatest monthly, 8.85, at Batesville; least monthly, 2.80, at Moss Point.

Wind.—Prevailing direction, north.—*R. B. Fulton, Observer, Weather Bureau, University, director.*

MISSOURI.

Temperature.—The mean was 2.5 below the normal; maximum, 75, at Grovedale, 3d; minimum, —22, at Langdon, 22d; greatest monthly range, 87, at Sedalia; least monthly range, 59, at Gordonville.

Precipitation.—The average was 0.31 above the normal; greatest monthly, 6.73, at Gayoso; least monthly, 0.51, at Paris.

Wind.—Prevailing direction, northwest.—*Levi Chubbuck, Secretary of State Board of Agriculture, Columbia, director; H. A. McNally, Observer, Weather Bureau, assistant.*

MONTANA.

Temperature.—Maximum, 60, at Great Falls, 27th; minimum, —32, at Camp Poplar River, 27th; greatest monthly range, 87, at Great Falls; least monthly range, 56, at Virginia City.

Precipitation.—Greatest monthly, 2.50, at Cokedale; least monthly, 0.19, at Boulder.

Wind.—Prevailing direction, west.—*E. J. Glass, Observer, Weather Bureau, Helena, director.*

NEBRASKA.

Temperature.—Maximum, 70, at Bassett, 1st; minimum, —23, at Bassett, 25th; greatest monthly range, 93, at Bassett; least monthly range, 50, at Whitman.

Precipitation.—Greatest monthly, 2.01, at Table Rock; least monthly, trace, at Brandon.

Wind.—Prevailing direction, northwest.—*Prof. Goodwin D. Swezey, Crete, director; G. A. Loveland, Observer, Weather Bureau, assistant.*

NEVADA.

Temperature.—The mean was 1.9 below the normal; maximum, 63, at Hot Springs and Reno, 27th; minimum, —23, at Stofiel, 21st; greatest monthly range, 73, at Sunnyside; least monthly range, 27, at Belmont.

Precipitation.—The average was 0.85 below the normal; greatest monthly, 5.51, at Lewers Ranch; least monthly, trace, at Mill City.

Wind.—Prevailing direction, south.—*Prof. Charles W. Friend, Carson City, director; F. A. Carpenter, Observer, Weather Bureau, assistant.*

NEW ENGLAND.

Temperature.—The mean was 2.2 below the normal; maximum, 58, at Middleboro, 10th; minimum, —17, at Farmington, 24th; greatest monthly range, 63, at Farmington; least monthly range, 41, at Worcester (a), New Haven, and Waterbury.

Precipitation.—The average was 2.19 below the normal; greatest monthly, 2.63, at Hyannis; least monthly, 0.38, at Cornwall.

Wind.—Prevailing direction, northwest.—*J. Warren Smith, Observer, Weather Bureau, Boston, director.*

NEW JERSEY.

Temperature.—The mean was 2.1 below the normal; maximum, 69, at Salem, 14th; minimum, 1, at Newton and Somerville, 27th, and at Dover, 29th; greatest monthly range, 64, at River Vale; least monthly range, 41, at Paterson.

Precipitation.—The average was 1.75 below the normal; greatest monthly, 3.09, at Ocean City; least monthly, 1.30, at Boonton and Pensauken.

Wind.—Prevailing direction, northwest.—*E. W. McGann, Observer, Weather Bureau, New Brunswick, director.*

NEW MEXICO.

Temperature.—Maximum, 79, at Deming, 1st; minimum, —13, at Monero, 15th; greatest monthly range, 71, at Chama; least monthly range, 42, at Monero.

Precipitation.—Greatest monthly, 1.77, at Chama; least monthly, trace, at Olio.—*H. B. Hersey, Observer, Weather Bureau, Santa Fe, director.*

NEW YORK.

Temperature.—The mean was 2.9 below the normal; maximum, 62, at Willets Point, 8th; minimum, —20, at Ampersand, Number Four, and Malone, 26th; greatest monthly range, 65, at Lyon Mountain and Watertown; least monthly range, 38, at Rondout.

Precipitation.—The average was 1.58 below the normal; greatest monthly, 6.28, at Eden Center; least monthly, 0.25, at Deposit.

Wind.—Prevailing direction, northwest.—*Prof. E. A. Fuertes, Dean of the College of Civil Engineering, Cornell University, Ithaca, director; R. M. Hardinge, Observer, Weather Bureau, assistant.*

NORTH CAROLINA.

Temperature.—The mean was 3.2 below the normal; maximum, 77, at Wilmington, 14th; minimum, —5, at Soapstone Mount, 29th; greatest monthly range, 78, at Pittsboro; least monthly range, 46, at Columbus, Salisbury, and Highlands.

Precipitation.—The average was 1.42 below the normal; greatest monthly, 4.14, at Smithfield; least monthly, 0.76, at Marion.

Wind.—Prevailing direction, northwest.—*Dr. Herbert B. Battle, Raleigh, director; C. F. von Herrmann, Observer, Weather Bureau, assistant.*

NORTH DAKOTA.

Temperature.—The mean was 3.7 below the normal; maximum, 60, at Medora, 2d; minimum, —39, at Woodbridge, 23d; greatest monthly range, 85, at Medora; least monthly range, 51, at Forman.

Precipitation.—The average was 0.35 below the normal; greatest monthly, 1.33, at Fort Buford; least monthly, trace, at Bottineau, Grafton, Saint Vincent, and Woodbridge.

Wind.—Prevailing direction, northwest.—*W. H. Fallon, Observer, Weather Bureau, Bismarck, director.*

OHIO.

Temperature.—The mean was 3.0 below the normal; maximum, 70, at Athens, Marietta, and McConnellsville, 7th, and at Hanging Rock, 6th; minimum, —12, at Garrettsville, 28th; greatest monthly range, 79, at Garrettsville; least monthly range, 59, at Greenville.

Precipitation.—The average was 0.76 below the normal; greatest monthly, 2.71, at Harbor; least monthly, 0.67, at Sharon Center.

Wind.—Prevailing direction, west.—*Prof. B. F. Thomas, Columbus, director; C. M. Strong, Observer, Weather Bureau, secretary and assistant.*

OKLAHOMA.

Temperature.—Maximum, 82, at Purcell, 4th; minimum, —4, at Ponca, 26th; greatest monthly range, 79, at Purcell; least monthly range, 60, at South McAlester.

Precipitation.—Greatest monthly, 5.57, at Lehigh; least monthly, 1.37, at Gate City.

Wind.—Prevailing direction, north.—*J. I. Widmeyer, Observer, Weather Bureau, Oklahoma City, director.*

OREGON.

Temperature.—The mean was 1.8 below the normal; maximum, 65, at Newport, 18th; minimum, —8, at Joseph, 20th; greatest monthly range, 61, at Pendleton; least monthly range, 25, at Vernonia.

Precipitation.—The average was 0.20 above the normal; greatest monthly, 17.83, at Glenora; least monthly, 0.16, at Burns.

Wind.—Prevailing direction, south.—*Hon. H. E. Hayes, Master State Grange, Portland, director; B. S. Pague, Local Forecast Official, Weather Bureau, assistant.*

PENNSYLVANIA.

Temperature.—The mean was 2.0 below the normal; maximum, 70, at Pittsburgh, 7th; minimum, —13, at Ligonier, 27th; greatest monthly range, 82, at Ligonier; least monthly range, 43, at Honesdale.

Precipitation.—The average was 1.31 below the normal; greatest monthly, 4.37, at Blue Knob; least monthly, 0.40, at Wellsboro.

Wind.—Prevailing direction, northwest.—*Under direction of the Franklin Institute, Philadelphia; H. L. Ball, Observer, Weather Bureau, assistant.*

SOUTH CAROLINA.

Temperature.—Maximum, 76, at Charleston, 14th, and at Cheraw, 15th;

minimum, 6, at Cheraw, 29th; greatest monthly range, 70, at Cheraw; least monthly range, 45, at Port Royal.

Precipitation.—Greatest monthly, 3.76, at Society Hill; least monthly, 1.60, at Trial.—*B. R. Stuart, Observer, Weather Bureau, Columbia, director.*

SOUTH DAKOTA.

Temperature.—The mean was 4.2 below the normal; maximum, 67, at Fort Meade, 1st; minimum, —25, at Webster, 26th; greatest monthly range, 86, at Fort Meade; least monthly range, 60, at Faulkton.

Precipitation.—The average was 0.05 below the normal; greatest monthly, 1.57, at Spearfish; least monthly, 0.12, at Plankinton.

Wind.—Prevailing direction, northwest.—*S. W. Glenn, Local Forecast Official, Weather Bureau, Huron, director.*

TENNESSEE WEATHER AND CROP SERVICE.

Temperature.—The mean was 3.0 below the normal, and with one exception, 1886, was the coldest December on record; maximum, 76, at Memphis, 5th; minimum, 5, at Rugby, 27th; greatest monthly range, 68, at Hohenwald; least monthly range, 45, at Andersonville.

Precipitation.—The average was 2.19 above the normal; greatest monthly, 12.96, at Covington; least monthly, 1.46, at Newport.

Wind.—Prevailing direction, north.—*J. B. Marbury, Local Forecast Official, Weather Bureau, Nashville, director.*

TEXAS.

Temperature.—The mean was 1.2 below the normal; maximum, 90, at La-grange, 4th, and at Twohig, 3d; minimum, zero, at Coldwater, 18th; greatest monthly range, 76, at Coldwater; least monthly range, 47, at Orange.

Precipitation.—The average was 1.41 above the normal; greatest monthly, 11.04, at Palestine; least monthly, 0.15, at Fort Hancock.

Wind.—Prevailing direction, north.—*D. D. Bryan, Galveston, director; I. M. Cline, Local Forecast Official, Weather Bureau, assistant.*

UTAH.

Temperature.—Maximum, 66, at Moab, 1st; minimum, —19, at Loa, 17th; greatest monthly range, 72, at Loa and Logan; least monthly range, 50, at Grouse Creek.

Precipitation.—Greatest monthly, 3.50, at Heber; least monthly, 0.20, at Losee.—*G. N. Salisbury, Observer, Weather Bureau, Salt Lake City, director.*

VIRGINIA.

Temperature.—Maximum, 74, at Richmond, 7th; minimum, —2, at Hot Springs, 29th; greatest monthly range, 70, at Spottsville; least monthly range, 47, at Bedford City.

Precipitation.—Greatest monthly, 3.91, at Norfolk; least monthly, 0.51, at Blacksburg.

Wind.—Prevailing direction, northwest.—*Dr. E. A. Craighill, Lynchburg, director; J. N. Ryker, Observer, Weather Bureau, assistant.*

WASHINGTON.

Temperature.—The mean was 2.5 below the normal; maximum, 68, at Vashon, 16th; minimum, —16, at Colfax, 20th; greatest monthly range, 59, at Romney; least monthly range, 23, at Olympia.

Precipitation.—The average was 0.59 below the normal; greatest monthly, 12.02, at Neah Bay; least monthly, 1.15, at Moxee Valley.

Wind.—Prevailing direction, south.—*H. F. Alciatore, Observer, Weather Bureau, Olympia, director.*

WEST VIRGINIA.

Temperature.—Maximum, 72, at New Cumberland, 7th; minimum, —10, at Buckhannon, 28th; greatest monthly range, 80, at Buckhannon; least monthly range, 54, at Martinsburg.

Precipitation.—Greatest monthly, 4.06, at Pleasant Hill; least monthly, 1.09, at Wheeling.

Wind.—Prevailing direction, west.—*W. W. Dent, Observer, Weather Bureau, Parkersburg, director.*

WISCONSIN.

Temperature.—The mean was 6.0 below the normal; maximum, 52, at Prairie du Chien, 3d; minimum, —26, at Butternut, 20th and 24th; greatest monthly range, 72, at Black River Falls and Whitehall; least monthly range, 45, at Appleton.

Precipitation.—The average was about 0.50 below the normal; greatest monthly, 2.76, at Raymond; least monthly, 0.44, at Bayfield.

Wind.—Prevailing direction, northwest.—*W. L. Moore, Local Forecast Official, Weather Bureau, Milwaukee, director.*

WYOMING.

Temperature.—Maximum, 80, at Wheatland, 4th; minimum, —34, at Casper, 23d; greatest monthly range, 100, at Wheatland; least monthly range, 64, at Fort Yellowstone.

Precipitation.—Greatest monthly, 2.17, at Fort Yellowstone; least monthly, 0.05, at Lusk.

Wind.—Prevailing direction, northwest.—*E. M. Ravenscraft, Observer, Weather Bureau, Cheyenne, director.*

METEOROLOGICAL TABLES.

Meteorological record of Army post surgeons, voluntary, and other co-operating observers, December, 1892.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
Alabama.	°	°	°	In.	Arkansas—Cont'd.	°	°	°	In.
Alico	78	20	52.0	...	Fulton	73	11	42.4	8.89
Bermuda	76	17	49.6	3.23	Gaines Landing	75	15	43.8	9.01
Citronelle	73	19	52.4	5.90	Harrison	75	11	42.4	3.30
Claborn Landing	74	17	52.4	3.85	Helena	73	11	42.4	11.69
Cordova	74	17	52.4	4.80	Hope	75	15	43.8	11.40
Daphne	74	17	52.4	5.30	Hot Springs	75	15	43.8	7.84
Decatur	74	17	52.4	5.47	Keesee Ferry	75	15	43.8	3.17
Demopolis	74	17	52.4	3.42	Lonoke	72	12	43.5	9.50
Florence	74	17	52.4	4.45	Madding	72	12	43.5	16.44
Florence	74	17	52.4	5.10	Melbourne	72	12	43.5	5.21
Gadsden	74	17	52.4	3.77	Mount Nebo	72	12	43.5	5.90
Geneva	74	17	52.4	2.70	New Gascony	72	12	43.5	15.04
Greensboro	74	17	52.4	4.56	Newport	72	12	43.5	8.05
Highland Springs	74	17	52.4	6.43	Newport	72	12	43.5	7.76
Highland Home	74	17	52.4	3.74	Ozark	72	12	43.5	10.76
Jasper	74	17	52.4	5.70	Pine Bluff	72	12	43.5	6.69
Livingston	74	17	52.4	5.01	Rogers	72	12	43.5	4.29
Livingston	74	17	52.4	4.13	Russellville	72	12	43.5	7.64
Lock No. 4	74	17	52.4	3.47	Searcy	72	12	43.5	13.03
Lynn	74	17	52.4	5.03	Stuttgart	72	12	43.5	13.32
Mayville	74	17	52.4	5.38	Texarkana	72	12	43.5	10.22
Mount Willing	74	17	52.4	4.78	Warm Springs	72	12	43.5	3.77
Newberg	74	17	52.4	4.48	Washington	72	12	43.5	11.40
Oxanna	74	17	52.4	2.94	Winslow	72	12	43.5	5.48
Scottsboro	74	17	52.4	5.96	California.	74	31	49.8	5.65
Selma	74	17	52.4	4.56	Agnew	74	31	49.8	5.65
Sturdevant	74	17	52.4	2.33	Alcalde	74	31	49.8	5.65
Talladega	74	17	52.4	3.50	Alvarado	74	31	49.8	5.65
Tuscaloosa	74	17	52.4	5.00	Anaheim	74	31	49.8	5.65
Tuscaloosa	74	17	52.4	4.42	Anderson	74	31	49.8	5.65
Tusculum	74	17	52.4	4.61	Antioch	74	31	49.8	5.65
Union Springs	74	17	52.4	3.73	Aptos	74	31	49.8	5.65
Uniontown	74	17	52.4	5.12	Arcata	74	31	49.8	5.65
Valley Head	74	17	52.4	5.88	Arlington Heights	74	31	49.8	5.65
Warrior	74	17	52.4	4.68	Athlone	74	31	49.8	5.65
Wetumpka	74	17	52.4	4.23	Auburn	74	31	49.8	5.65
Wilsonville	74	17	52.4	4.15	Bakersfield	74	31	49.8	5.65
Arizona.	74	17	52.4	3.49	Ballast Point L. H.	74	31	49.8	5.65
Aria, Can. Co. Dam	74	17	52.4	0.45	Beaumont	74	31	49.8	5.65
Bisbee	74	17	52.4	0.37	Belmont	74	31	49.8	5.65
Calabasas	74	17	52.4	0.24	Berendo	74	31	49.8	5.65
Casa Grande	74	17	52.4	1.14	Berkeley	74	31	49.8	5.65
Chiricahua Mts.	74	17	52.4	1.18	Bishop Creek	74	31	49.8	5.65
Dragon Summit	74	17	52.4	0.20	Boca	74	31	49.8	5.65
Dudleyville	74	17	52.4	0.36	Borden	74	31	49.8	5.65
Eagle Pass	74	17	52.4	0.40	Boulder Creek	74	31	49.8	5.65
Farley Camp	74	17	52.4	0.60	Brentwood	74	31	49.8	5.65
Flagstaff	74	17	52.4	1.10	Byron	74	31	49.8	5.65
Florence	74	17	52.4	0.13	Caliente	74	31	49.8	5.65
Fort Apache	74	17	52.4	0.69	Calistoga	74	31	49.8	5.65
Fort Bowie	74	17	52.4	0.60	Capitola	74	31	49.8	5.65
Fort Grant	74	17	52.4	0.15	Castroville	74	31	49.8	5.65
Fort Huachuca	74	17	52.4	0.43	Centerville	74	31	49.8	5.65
Fort Mohave	74	17	52.4	0.00	Chico	74	31	49.8	5.65
Gila Bend	74	17	52.4	0.34	Chino	74	31	49.8	5.65
Gila Bend	74	17	52.4	0.34	Cisco	74	31	49.8	5.65
Holbrook	74	17	52.4	0.38	Citrus	74	31	49.8	5.65
Maricopa	74	17	52.4	0.00	Cloverdale	74	31	49.8	5.65
Mount Huachuca	74	17	52.4	0.00	Colfax	74	31	49.8	5.65
Natural Bridge	74	17	52.4	0.43	Colton	74	31	49.8	5.65
New River	74	17	52.4	0.45	Cornwall	74	31	49.8	5.65
Nogales	74	17	52.4	0.45	Crescent City	74	31	49.8	5.65
Oracle	74	17	52.4	0.45	Crofton	74	31	49.8	5.65
Oro	74	17	52.4	0.30	Davisville	74	31	49.8	5.65
Pantano	74	17	52.4	0.10	Davisville	74	31	49.8	5.65
Payson	74	17	52.4	0.74	Delano	74	31	49.8	5.65
Peoria	74	17	52.4	0.21	Delta	74	31	49.8	5.65
Phoenix	74	17	52.4	0.00	Downey	74	31	49.8	5.65
Red Rock	74	17	52.4	0.00	Drytown	74	31	49.8	5.65
Reymert	74	17	52.4	0.40	Duarte	74	31	49.8	5.65
Rye	74	17	52.4	0.38	Dunnigan	74	31	49.8	5.65
San Carlos	74	17	52.4	0.22	Dunsmuir	74	31	49.8	5.65
San Simon	74	17	52.4	0.05	East Brother L. H.	74	31	49.8	5.65
Signal	74	17	52.4	0.08	Edgewood	74	31	49.8	5.65
Teviston	74	17	52.4	0.20	Edmonton	74	31	49.8	5.65
Texas Hill	74	17	52.4	0.00	El Casco	74	31	49.8	5.65
Tucson	74	17	52.4	0.25	El Colorado	74	31	49.8	5.65
Tucson	74	17	52.4	0.40	Elmira	74	31	49.8	5.65
Walnut Ranch	74	17	52.4	0.59	El Verano	74	31	49.8	5.65
Whipple Barracks	74	17	52.4	0.61	Emigrant Gap	74	31	49.8	5.65
Willcox	74	17	52.4	0.40	Esparto	74	31	49.8	5.65
Willcox	74	17	52.4	0.17	Evergreen	74	31	49.8	5.65
Yuma	74	17	52.4	0.00	Exeter	74	31	49.8	5.65
Arkansas.	74	17	52.4	10.30	Fall Brook	74	31	49.8	5.65
Arkadelphia	74	17	52.4	7.26	Farmington	74	31	49.8	5.65
Arkansas City	74	17	52.4	8.55	Felton	74	31	49.8	5.65
Bee Branch	74	17	52.4	4.39	Fernando	74	31	49.8	5.65
Black Rock	74	17	52.4	13.44	Florence	74	31	49.8	5.65
Brinkley	74	17	52.4	11.73	Florin	74	31	49.8	5.65
Camden	74	17	52.4	12.51	Folsom City	74	31	49.8	5.65
Camden	74	17	52.4	11.73	Folsom City	74	31	49.8	5.65
Conway	74	17	52.4	3.91	Fort Bidwell	74	31	49.8	5.65
Conway	74	17	52.4	3.91	Fouts Springs	74	31	49.8	5.65
Dallas	74	17	52.4	7.47	Fresno	74	31	49.8	5.65
Dardanelle	74	17	52.4	8.70	Fruto	74	31	49.8	5.65
Eldorado	74	17	52.4	8.23	Galt	74	31	49.8	5.65
Fayetteville	74	17	52.4	5.34					
Forrest	74	17	52.4	43.1					

Meteorological record of voluntary observers, etc.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
California—Cont'd.	°	°	°	In.	California—Cont'd.	°	°	°	In.
Georgetown†	59	28	42.7	15.76	Point Fermin	62	39	50.5	2.75
Gilroy†	68	28	48.9	3.99	Point Hueneme L.H.	62	39	50.5	5.25
Girard†	55	23	40.9	0.19	Point Lobos	62	39	50.5	4.39
Glendora	70	27	48.1	4.43	Point Loma L. H.	62	39	50.5	0.25
Glen Ellen†	70	27	48.1	14.96	Point Montara L. H.	62	39	50.5	5.55
Goshen†	70	24	46.1	0.00	Point Pinos L. H.	62	39	50.5	3.45
Grass Valley a	63	23	39.2	11.22	Point Reyes L. H.	62	39	50.5	4.60
Grass Valley b	56	23	39.2	11.91	Point Sur L. H.	62	39	50.5	3.58
Haywards†	63	34	47.7	5.82	Pomona†	95	26	48.8	2.30
Hollister†	70	27	47.9	3.79	Porterville†	73	30	48.9	2.30
Hornbrook†	62	18	36.6	3.98	Poway	72	33	50.3	3.58
Humboldt L. H.	70	30	49.0	5.54	Puente†	75	34	53.1	2.65
Huron†	70	30	49.0	0.85	Ravenna†	75	26	47.2	1.65
Hyde Ranch	64	29	45.7	10.66	Red Bluff†	78	30	47.0	9.02
Hydesville†	64	29	45.7	10.66	Redding a†	67	28	46.7	14.27
Independence a†	65	18	40.8	1.61	Redding b†	67	28	47.6	10.79
Indio†	87	30	58.2	0.00	Redlands a	72	33	50.3	1.58
Ion†	68	26	48.6	6.53	Redlands b†	72	33	50.3	1.14
Iowa Hill†	62	31	44.6	11.88	Rialto†	83	30	52.2	2.46
Jackson	73	23	47.8	5.52	Riverside a†	76	26	51.0	1.58
Jolon	62	31	44.6	6.61	Rocklin†	76	32	51.0	6.96
Julian†	75	24	41.2	2.81	Rumsey†	62	33	50.3	11.37
Keeler†	60	28	41.9	0.54	Sacramento a†	62	22	41.9	4.81
Keene†	62	22	41.7	1.98	Sacramento b†	66	28	51.1	4.12
Kennedy Gold	60	28	43.3	6.99	Sacramento c†	62	35	48.2	4.12
King City†	80	28	61.0	4.78	Salinas a	68	30	49.8	2.13
Kingsburg†	70	27	48.7	1.72	Salinas b†	62	30	47.5	4.30
Knights Landing†	68	34	52.3	5.70	Salton†	80	30	57.8	0.00
Kono Tayee	68	34	52.3	5.70	Sanger	72	30	47.4	1.23
Lagrange b	68	30	47.5	2.88	Sanger Junction†	68	28	48.9	3.40
Lathrop†	69	30	48.2	3.86	San Ardo a†	67	26	47.7	3.13
Laurel†	67	32	49.3	22.66	San Ardo b†	77	26	50.4	2.23
Lemoore†	70	25	48.4	1.22	San Bernardino†	77	26	50.4	2.23
Lime Point L. H.	69	31	48.9	7.27	San Gabriel†	78	33	52.3	3.91
Livermore†	72	32	51.0	1.54	San Jacinto	79	31	48.6	1.27
Livingston†	67	29	47.6	5.42	San Jose a†	72	34	50.3	7.77
Lodi†	72	32	52.7	7.77	San Jose b	71	25	47.6	6.06
Long Beach†	69	31	48.9	7.27	San Luis L. H.	68	35	51.3	3.55
Los Angeles†	69	31	48.9	7.27	San Miguel†	70	24	47.6	3.27
Los Banos†	75	28	50.7	2.68	San Pedro†	78	40	55.6	3.31
Los Gatos a†	68	29	48.0	14.88	Santa Ana†	86	37	55.5	1.46
Los Gatos b†	68	33	46.4	14.95	Santa Barbara a	76	38	54.4	6.66
Mammoth Tank†	84	26	52.5	0.20	Santa Barbara b†	73	36	52.8	7.31
Mare Island L. H.	70	30	49.0	5.45	Santa Barbara L. H.	71	34	49.7	5.67
Martinez†	66	32	47.7	6.97	Santa Clara b	65	31	49.7	7.75
Marysville a†	70	30	47.9	3.66	Santa Cruz b†	71	34	49.7	7.75
Menlo Park†	67	33	51.4	6.55	Santa Cruz L. H.	68	31	49.7	7.15
Merced†	69	30	48.5	2.75	Santa Margarita	72	20	44.4	6.49
Middletown	63	33	48.4	14.77	Santa Maria b†	70	30	51.5	2.52
Milton (near)†	63	32	45.4	4.54	Santa Monica†	70	33	56.5	3.15
Modesto a†	69	32	47.9	2.44	Santa Paula†	68	32	52.1	2.58
Modesto b†	68	25	43.7	0.56	Santa Rosa†	77	30	51.2	6.55
Mohave†	67	27	46.9	2.13	Saticoy†	68	28	47.0	6.03
Montague†	61	18	37.9	2.21	Selma†	55	19	35.9	17.46
Monterey†	66	30	53.2	3.04	Shingle Springs†	65	28	45.8	6.25
Monterey (Hotel del Monte)†	70	30	51.8	8.20	Sims†	50	20	39.9	26.92
Mountain View	64	29	47.8	8.34	Sisson†	50	20	35.6	9.57
Napa City a†	62	31	49.2	7.96	Soledad†	70	28	49.1	2.97
Napa City b†	60	33	54.0	1.48	Sonoma†	68†	30	51.1	7.97
National City†	75	33	52.6	0.00	Sonora†	61	26	42.7	4.66
Needles a†	74	33	52.6	0.00	S. E. Farrallon L. H.	64	35	50.6	2.87
Needles b†	75	33	52.6	0.00	South Vallejo†	78	32	51.0	0.00
Nevada City†	55	26	38.8	14.19	Stockton a	72	28	47.4	2.99
New Almaden†	70	33	50.5	13.90	Stockton b†	67	30	47.1	9.39
Newark†	68	36	52.7	4.82	Summit†	45	8	27.2	9.50
Newcastle a†	66	32	45.5	3.45	Suisun City†	68	32	51.2	7.06
Newcastle b†	66	32	45.5	3.45	Susunville†	54	10	29.3	6.80
Newhall†	78	24	49.3	4.16	Sutter Creek b	60	23	40.2	6.36
Newman†	67	35	57.6	4.24	Tehachapi a	63	19	38.1	0.40
Niles†	69	30	47.7	3.21	Tehachapi b	61	10	39.4	1.52
Nordhoff†	77	25	49.7	8.75	Tehama†	66	32	56.3	12.96
Norwalk†	80	31	54.5	2.30	Templeton†	70	23	46.4	3.94
Oakdale a	78	25	43.0	2.85	Towles†	59	26	40.4	17.33
Oakdale b	63	34	49.4	6.47	Tracy†	69	30	49.9	7.78
Oakdale b†	63	30	52.8	8.04	Traver†	65	26	44.8	1.93
Oakland	63	30	52.8	8.04	Tropico†	75	37	54.3	5.30
Ogilby†	83	40	56.6	0.00	Truckee†	50	—	23.7	8.15
Oleta	64	27	43.6	7.51	Tulare a†	65	28	46.4	1.34
Ontario†	78	32	51.4	1.53	Tulare b	50	—	23.7	8.15
Orangevale†	63	29	47.2	6.95	Turlock a	68	30	47.9	2.75
Orland†	63	33	48.8	5.67	Turlock b†	69	24	46.6	2.50
Oroville†	72	35	51.0	3.52	Ukiah†	69	26	43.9	8.93
Pajaro†	64	30	52.1	9.81	Upper Mattole	62	38	47.0	24.48
Palm Springs†	85	32	56.1	0.00	Vacaville a†	68	33	49.6	7.11
Pasadena	80	33	52.6	4.67	Vacaville b†	68	33	48.9	6.50
Paso Robles†	68	31	44.9	5.02	Valley Springs†	67	30	53.1	7.66
Petaluma†	66	33	50.0	5.59	Ventura†	67	42	54.0	5.80
Piedras Blancas L.H.	63	30	46.0	4.06	Vina†	65	34	49.3	5.88
Pigeon Point L. H.	64	28	44.0	15.48	Volcano Springs†	82	29	53.8	0.00
Placerville a†	63	22	40.0	10.53	West Butte	70	32	51.0	4.11
Placerville b†	60	29	49.8	6.30	Wheatland	64	31	47.6	4.32
Placerville c†	66	27	47.6	4.35	Whittier†	79	40	57.0	2.87
Point Arena L. H.	70	30	49.0	4.00	Williams†	66	32	51.3	2.44
Point Bonita L. H.	70	30	49.0	8.50	Willows a†	57	29	45.4	5.81
Point Conception L. H.	70	30	49.0	6.97	Willows b†	70	33	48.9	6.45
				7.45	Winchester†	78	24	49.8	1.06

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
<i>California—Cont'd.</i>					<i>Dist. of Col.—Cont'd.</i>				
Winters *1	67	30	50.3	13.68	Rec'ing Reserv'r *2	63	11	32.4	2.79
Woodland *1	62	32	48.5	6.10	West Washington, 1	67	12	34.0	2.82
Yerba Buena L. H.				4.35	<i>Florida.</i>				
Yreka *1	57	18	34.2	3.64	Amelia *1	76	30	56.4	4.04
Yuba City *2	61	32	48.6	5.52	Archer *1	84	25	57.5	3.40
<i>Colorado.</i>					Avon Park *1	83	37	63.8	0.70
Abbott				0.37	Bristol *1	81	36	61.4	4.35
Agate *1	66	—3	27.0	0.92	Brooksville *1	79	31	59.0	2.10
Alma *1	43	—21	15.6	0.84	Clermont *1	84	35	63.4	2.28
Arboles				0.40	De Land	83	28	60.1	0.70
Bennet *1	70	—8	25.7	1.30	Eustis *1	83	30	59.8	4.26
Box Elder				0.21	Federal Point *1	80	30	57.7	1.80
Breckenridge *1	58	—25	14.7	4.64	Fort Meade *1	82	29	61.8	1.15
Brush				0.18	Grasmere	81	32	61.2	0.70
Byers *1	63	—4	25.2	0.70	Green Cove Sp'gs *1	81	30	57.7	1.60
Castle Rock *1	61	—8	23.2	1.90	Homeland *1	83	30	60.2	1.48
Cheyenne Wells *1	69	10	27.8	0.96	Hypoluxo *1	79	42	66.4	4.06
Climax *1	59	—8	9.2	6.60	Lake City *1	79	32	60.2	0.99
Collbran				1.13	Merritts Island *1	79	35	64.9	0.70
Como (near) *1	44	—11	15.5	0.89	Moseley Hall *1	74	27	56.8	4.86
Cope *1	60	—4	25.4	0.55	Mullet Key *1	74	42	60.7	1.73
Crook *1	77	—0	30.6	0.51	Myers *1	83	40	64.0	1.73
Cumbres *1	40	—25	13.0	4.06	New Smyrna *1	80	30	59.6	2.30
Deer Trail *1	64	—6	24.8	0.80	Ocala *1	80	26	58.3	2.42
Del Norte *1	50	—5	20.4	0.38	Orange City *1	90	26	60.9	2.68
Delta *1	66	—11	24.4	0.15	Orlando *1				2.03
Dillon *1				3.08	Oxford *1	80	28	58.9	2.83
Downing *1	69	—12	26.7	0.95	Plant City *1	87	30	62.2	2.32
Dumont				1.10	Saint Francis B'ks.	80	30	55.7	1.77
First View *1	68	—8	29.0	0.10	St. Petersburg *1	81	38	61.8	2.47
Fort Collins (near).				0.24	Tallahassee *1	78	25	54.3	6.89
Fruita *1	60	—1	26.0	0.09	Tarpon Springs *1	83	33	60.7	2.25
Garnett				0.13	<i>Georgia.</i>				
Gaynor				0.32	Adairville *1	67	15	40.6	2.88
Georgetown *1	49	—4	24.2	0.84	Alapaha *1	78	23	52.0	4.69
Glen Eyrie *1	39	—0	24.1	0.64	Albany *1	74	30	53.8	0.70
Gold Hill	60	—2	26.1	1.80	Americus *1	77	18	51.6	2.73
Grand Junction *1	57	—7	26.2	0.10	Athens *1	67	18	43.7	3.55
Greenhorn *1	63	—7	26.2	3.65	Athens *1	68	15	44.0	3.71
Grover *1	57	—12	24.6	0.10	Blakely *1	75	22	52.2	3.47
Hugo *1	67	—12	22.5	0.29	Camak *1				2.27
Husted *1	67	—20	24.8	0.95	Canton *1				2.85
Julesburg *1	68	—20	25.3	0.41	Cordele *1	75	16	48.5	3.18
Kirk				0.05	Dahlonega *1	70	15	43.8	3.90
Kit Carson *1	70	—10	25.2	0.36	Darien *1	82	25	56.7	3.25
La Jara *1	60	—13	22.2	0.36	Diamond *1	77	12	39.7	3.62
Lamar *1	75	—5	29.2	0.28	Dublin *1	78	22	49.0	2.74
La Porte				0.47	Elberton *1	79	16	45.8	4.04
Las Animas *1	78	—12	28.5	0.50	Forayth *1	76	24	51.4	4.44
Le Roy *1	64	—7	25.2	0.65	Fort Gaines *1	76	22	52.8	3.31
Lowland				0.50	Gillsville *1	70	27	46.3	2.90
Manhattan				0.30	Hawkinsville *1	75	14	48.4	2.17
Meeker *1	39	—16	23.8	1.30	Hephzibah *1	72	28	50.4	2.86
Middle Box Elder				0.23	Homerville *1	80	26	54.0	3.70
Minneapolis *1	72	—11	29.8	0.65	Lafayette *1	65	13	40.4	3.59
Moraine *1	48	—11	23.8	0.60	Lagrange *1	75	18	45.2	4.68
Pagoda (near) *1	54	—23	19.0	1.90	Lincolnton *1	78	20	48.0	1.88
Paonia *1				0.53	McArthur *1	78	24	51.9	5.13
Parachute *1	62	—1	25.6	0.19	Marietta *1	70	13	41.4	4.06
Rico				1.21	Marshallville *1	74	18	47.4	2.77
River Bend *1	68	—4	27.4	0.31	Milledgeville *1	74	19	47.4	2.77
Robb *1	67	—0	27.4	0.31	Millen *1	78	18	49.6	2.54
Rocky Ford *1	73	—14	26.0	0.46	Mount Vernon *1	75	29	53.3	3.38
San Luis *1	55	—24	19.5	1.30	Mount Vernon *1				2.27
Seibert				0.14	New Albany *1	78	26	54.8	4.07
Sheridan Lake *1				0.16	Point Peter *1	60	18	45.0	3.25
Smoky Hill Mine *1	68	—8	27.7	2.70	Poulan *1	80	20	51.3	2.36
Surface Creek *1	56	—0	25.3	0.35	Quitman *1	80	24	58.6	2.79
Table Rock	53	—11	21.2	0.97	Rosaca *1				3.07
Thon *1	65	—5	25.4	1.20	Rome *1	65	16	41.8	4.10
Vilas				0.20	Statesboro *1	76	30	51.3	2.95
Villa Grove *1				1.64	Thomasville *1	76	24	54.4	3.63
Walton *1				0.30	Toccoa *1	70	18	43.2	3.62
Ward District				1.52	Union Point *1				1.14
Watkins *1	64	—0	27.5	1.10	Waynesboro *1				1.61
Wilke				0.40	<i>Idaho.</i>				
Yuma				0.62	American Falls *1	47	—17	23.8	1.97
<i>Connecticut.</i>					Boise Barracks	58	7	33.4	0.94
Canton	43	—4	25.4	1.48	Fort Sherman	45	6	22.6	4.80
Colchester	49	—2	27.5	1.37	Garden Valley *1	49	6	27.4	4.54
Falls Village				1.24	Henry Lake *1	46	—25	16.8	2.70
Hartford *1				1.22	Kootenai *1	42	—10	26.1	5.85
Lake Konomoc				1.46	Moscow *1	50	—1	27.6	2.99
Lebanon				1.28	Payette *1	58	9	32.2	1.68
Middletown	50	—3	27.6	1.74	<i>Illinois.</i>				
New Hartford *1	35	—3	20.1	1.06	Alton *1				2.17
New Hartford *1				1.90	Atwood *1	58	—10		2.41
N. Grosvenor Dale	44	—0	25.3	1.29	Aurora *1	56	—16	18.5	2.26
Norwalk *1	46	—2	26.9	1.54	Aurora *1	57	—11	21.6	2.54
Southington *1	43	—4	26.3	1.30	Beardstown *1				2.08
South Manchester				1.27	Bloomington *1	60	—10	27.0	1.21
Stevenson				1.48	Bushnell *1	56	—8	26.4	1.63
Storrs *1	46	—1	25.5	1.35	Carlinville *1	50	—4	30.0	1.69
Thompson *1	40	—0	22.2	1.30	Chester *1				1.64
Voluntown *1	52	—0	27.8	1.62	Collinsville *1	62	—2	30.7	2.04
Wallingford *1				1.89	Decatur *1	56	—11	26.5	2.52
Waterbury	45	—4	28.2	1.74	Dixon *1	48	—16	18.6	3.52
West Simsbury				1.28	East Peoria *1	69	—6	27.4	1.06
<i>Delaware.</i>					Effingham *1	65	—4	30.0	1.20
Dover *1	67	12	32.9	2.10	Ellsworth *1	64	—10	27.8	1.30
Kirkwood *1	50	—20	29.4	2.51	Fairmount *1	64	—11	29.7	1.50
Seaford *1	66	10	33.4	3.51	Fort Sheridan *1	58	—8	22.4	2.60
<i>District of Columbia.</i>					Galva *1	54	—12	22.0	1.62
Dist'ing Reserv'r *2	63	10	32.6	3.02	Golconda *1	70	—6	37.6	1.58
Long Bridge *1				2.87					

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
<i>Illinois—Cont'd.</i>					<i>Iowa—Cont'd.</i>				
Greenville† ¹	64	—4	30.8	2.28	Corning † ¹	55	—18	19.0	1.73
Griggsville†	63	—9	26.4	0.92	Cresco † ¹	49	—19	13.6	0.22
Havana†	60	—5	29.9	1.42	Decorah†	51	—23	16.6	1.13
Hennepin†	56	—14	21.6	2.30	Delaware* ¹	54	—20	14.2	1.96
Irontown				1.36	Denison†	58	—18	18.4	1.20
Jordans Grove†	64	—0	34.1	2.19	Eagle Grove* ¹		—20	12.8	1.25
Lagrange†	59	—12	23.7	1.93	Eldora	48†	—20†	13.1†	1.80
Louisville* ¹	67	—1	32.4	0.75	Fairfield†				3.02
McLeansboro* ¹	72	—0	33.6	0.98	Fayette†	47†	—21†	17.2†	1.18
Martinsville†	62	—2	30.7	1.12	Fort Madison*† ¹	52	—7	28.0	2.11
Masscutah* ¹	62	—4	30.7	1.55	Galva†	52	—17	18.1	1.43
Mattoon	57	—5	32.0	0.90	Glenwood†	64	—16*	24.8	1.87
Mount Carmel†				1.25	Grand Meadow* ¹	44	—13	17.1	1.95
Muddy Valley* ¹				1.31	Greenfield†	52	—19	18.5	2.04
New Haven†				3.06	Grinnell†	49	—17	18.2	2.81
Olney* ¹	68	—0	33.6	1.03	Grundy Center†	50	—19	16.7	1.87
Olney* ¹	70	—3	28.2	1.36	Hampton†	50	—19	14.8	1.49
Oregon*† ¹	44	—15	19.6	1.90	Hawkeye				2.02
Oswego†	56	—14	19.9	1.97	Hopewell†	52	—18	19.8	1.19
Ottawa†	60	—12	23.7	1.84	Hopkinton*	43	—11	22.2	2.25
Palestine† ¹	66	—0	31.0	2.00	Independence†	50	—20	16.4	1.29
Pana* ¹	63	—6	28.0	4.33	Indianola†	53†	—17†	19.6†	1.57
Peoria†				1.94	Iowa City†	48	—16	19.5	2.84
Peoria† ¹	57	—6	28.3	1.75	Iowa Falls† ¹	50	—22	14.7	0.80
Phil† ¹	60	—6	27.5	1.80	Keosauqua†	55	—6	24.2	2.07
Quincy†				1.51	Larrabee†	53	—19	17.6	0.50
Rantoul* ¹	62	—15	25.2	1.39	Le Claire†				2.42
Riley†	46	—13	17.9	1.71	Logan†	62	—15	22.2	1.62
Rockford†	42	—11	19.6	2.96	Maquoketa* ¹	44	—18	18.7	2.29
Rushville	58	—8	27.6	2.09	Marshall†	50	—15	17.9	1.65
Saint John* ¹	70	—5	32.6	1.35	Maxon†	51	—19	18.5	2.58
Shawneetown†				1.36	Mechanicsville	42	—17	18.4	2.50
Sycamore* ¹	51	—11	20.6	2.06	Monticello† ¹	43	—18	16.9	1.96
Walnut†	52	—12	22.4	1.94	Mount Ayr†	57	—17	23.4	1.45
Warsaw†				0.55	Mount Pleasant* ¹	58		22.2	1.25
Watseka†				21.2	Mount Vernon* ¹	45	—17	19.0	—
White Hall* ¹	58	—4	28.0	1.94	Murray†	50	—17	19.9	1.19
Winnebago†	42	—12	16.7	2.38	Oake†		—16	13.8	1.33
<i>Indiana.</i>					Oakaloosa† ¹	54	—15	19.8	1.53
Angola†	52	—7	27.6	1.03	Panama†	55	—16	18.9	0.49
Ashboro*† ¹	54	—5	31.2	0.75	Richland* ¹		—19	17.3	2.36
Butlerville* ¹	66	—3	30.7	1.25	Sidney	65	—15	22.1	0.92
Carmel City†	67	—1	29.2	1.89	Storm Lake†	48	—19	18.4	2.53
Columbia City* ¹	56	—2	26.4	1.31	Tipton†	44	—13	19.5	2.13
Columbus* ¹	64	—4	32.6	1.51	Vinton* ¹	50	—15	17.0	2.00
Connersville†	65	—3	30.6	1.49	Washington* ¹	46	—12	23.0	1.85
Crawfordsville†	63	—4	32.0	2.01	Webster City* ¹	52	—15	16.4	1.92
Degonia Springs* ¹	70	—5	34.8	2.16	Williams* ¹		—18	12.4	—1.41
Evansville†				1.82	Winterset†	54	—18	19.8	1.85
Farmland* ¹	64	—4	29.8	1.41	<i>Kansas.</i>				
Franklin†	63	—1	29.4	2.20	Abilene†	62	—8	24.7	2.79
Hawpatch*† ¹	55	—4	26.4	1.34	Allison*† ¹	59	—6	21.7	0.74
Huntington†				1.23	Altونا*† ¹	67	—7	29.2	2.59
Irrington*† ¹	60	—4	29.5	2.59	Atchison†	62	—11	26.0	1.75
Jeffersonville ¹	69	—7	34.4	2.24	Bucklin				1.10
Kokomo† ¹	61	—5	30.7	1.21	Burr Oak*	55	—8		0.85
Lafayette†	61	—11	27.2	1.55	Cawker City* ¹	70	—4	27.7	0.50
Logansport†				1.08	Colby	64	—6	23.7	0.68
Logansport †	64	—8	39.1	1.10	Collyer* ¹	62	—8	28.2	—
Madison†				0.15	Columbia†	70 ^a	—9 ^a	31.4	4.06
Marengo* ¹	70	—10	36.4	3.00	Cunningham† ¹	63	—5	24.2	0.85
Mauzy	64	—1	28.2	1.51	Downs				1.67
Michigan City†	63	—2	29.6	2.12	Elec* ¹	68	—13	28.0	2.84
Mount Vernon†				1.99	Elk Falls†				2.15
Mount Vernon †	65	—2	35.0	2.88	Emporia† ¹	66	—7	28.4	2.95
New Albany*† ¹	69	—5	34.3	1.60	Englewood* ¹	67	—12	25.8	1.10
Point Isabel†	61	—4	29.6	2.10	Eureka Ranch†	57	—7	25.0	0.63
Princeton*† ¹	69	—0	32.6	2.10	Fort Riley†	64	—10	24.9	2.34
Rockville	61	—8	27.4	1.47	Gibson†	56	—0	25.2	0.40
Rushville†				1.07	Gove City*† ¹	58	—2	25.0	1.40
Seymour†	66	—5	31.2	2.50	Grainfield†	60	—4	26.4	0.40
Terre Haute†				1.20	Greensburg†	71	—3	27.4	1.45
Union City	64	—2	27.8	—	Grenola†	73	—0	31.7	1.30
Vevay†	67	—7	32.7	1.24	Grinnell* ¹	60	—0	28.8	0.38
Vincennes†				0.75	Havensville*† ¹	64	—9	23.0	2.62
Worthington†	64	—2	30.8	1.37	Hays City†	59	—3	28.4	1.10
<i>Indian Territory.</i>					Heaton	61	—11	23.8	1.45
Eufaula†				4.08	Horton†	64	—12	25.2	3.01
Fort Supply	73	—1	29.9	1.80	Hutchinson†	67	—5	28.4	2.11
Gwendale†				3.70	Independence†	73	—6	32.3	3.00
Healdton†	72			2.56	Kansas City† ¹	70	—13	26.5	1.53
Lehigh†	78	—6	40.0	5.57	Kellogg	68	—11	30.4	2.35
Purcell†	82	—3	39.2	2.82	Kiowa†	72	—2	28.5	2.47
South McAlester†	70	—10	44.2	5.28	Kirwin†				0.38
Tulsa†				4.00	La Crosse†	58	—2	26.4	1.00
<i>Iowa.</i>					Lakin†	69	—2	30.0	0.50
Algona† ¹	50	—20	17.6	0.40	Lawrence	67	—9	26.2	1.83
Alta† ¹	52	—20	16.6	0.64	Lebo†	67	—10	27.4	2.54
Amama†	45	—17	17.0	1.90	Leoti†	70	—1	26.4	0.60
Ames †	53	—29	15.2	0.92	Liberal†	71	—3	26.8	1.50
Ames †				1.51	McPherson†	60	—8	26.0	2.00
Ames (near)	52	—18	19.5	1.30	Manhattan†				1.65
Atlantic† ¹	50	—24	17.8	1.70	Manhattan †	67	—9	24.0	1.75
Belle Plaine†	49	—19	17.4	2.24	Manhattan †	63 ^a	—7 ^a	23.8 ^a	1.58
Blakeville* ¹	54	—15	17.2	2.51	Marion†	67	—9	25.2	2.51
Blackton†	55	—19	20.4	0.80	Marmaton				2.54
Bonaparte† ¹	54	—10	24.9	1.89	Medicine Lodge				2.65
Carroll†		—18		1.12	Minneapolis*† ¹	54	—8	24.6	1.21
Cedar Falls†	51	—19	16.2	1.00	Monument* ¹	68	—9	20.7	0.81
Cedar Rapids†	44	—12	19.7	2.02	Morland†	62	—7	25.6	0.32
Centerville†	54	—32	30.3	2.12	Morse†	69	—15	24.0	2.55
Charles City†	42	—20	16.1	1.35	Morton†	72	—3	30.8	0.40
Clarinda† ¹	54	—15	21.2	2.16	N. England Ranch†	67	—2	25.9	—
Clinton†	42	—17	18.2	3.32	Oakley* ¹	75	—8	28.2	—
College Springs	62 ^a	—18 ^a	21.5 ^a	3.04	Oberlin†				1.10

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Kansas—Cont'd.	0	0	0	Ins.	Maine—Cont'd.	0	0	0	Ins.
Oswego† ¹	72 ^b	-10 ^b	31.8 ¹	1.15 ¹	Farmington†.....	46	-17	21.0	1.39
Page City† ¹	52	-3	28.6	0.25	Gardiner†.....	43	-7	22.2	1.07
Pauline† ¹	68	-4	29.4	1.75	Houlton†.....	37	-13	16.6	1.42
Phillipsburg†.....	56	-5	24.8	0.12	Indian Stream†.....	37	-12	14.9	0.95
Pleasant Dale† ¹	56	-6	26.0	0.93	Kennebec Arsenal.....	42	-8	16.5	0.96
Quinter.....	67	-4	31.2	2.73	Kents Hill.....	41	-12	20.4	1.37
Rome† ¹	56	-6	26.0	0.81	Lewiston†.....	42	-8	21.2	1.49
Salina† ¹	56	-6	26.9	2.52	Orono† ¹	43	-8	21.3	2.26
Sedan† ¹	74	-8	30.5	3.39	Petit Menan† ¹	45	-3	26.0	.....
Shields†.....	73 ^a	2 ^a	37.0 ^a	0.15	West Jonesport† ¹	44	-7	23.5	.....
Sterling†.....	62	-5	29.6	1.20	Maryland.				
Syracuse.....	65	1	27.0	1.50	Barren Cr'k Sp'gs† ¹	67	11	33.4	2.13
Topeka.....	69	-11	24.4	1.66	Boettcheville† ¹	64	6	31.5	2.10
Tribune†.....	70	3	28.2	T.	Cumberland a†.....	56	9	31.6	1.73
Ulysses†.....	70	5	30.5	0.65	Cumberland b†.....	60	12	33.6	1.64
Wa Keeney† ¹	60	4	26.8	0.40	Darlington†.....	61	8	30.4	2.23
Wakefield† ¹	60	-8	27.5	2.75	Denton† ¹	66	12	33.1	1.93
Wallace a†.....	72	5	27.4	0.10	Easton†.....	55	12	30.1	2.32
Wallace b† ¹	72	5	27.4	0.10	Edgemont†.....	70	7	34.5	.....
Weskan a.....	.....	.....	.....	.....	Fallston† ¹	58	10	30.7	2.21
Yates Center†.....	.....	.....	.....	.....	Fenby.....	63	8	31.1	1.60
Kentucky.					Frederick†.....	58	11	32.4	2.04
Bowling Green† ¹	72	9	39.6	7.73	Great Falls† ¹	65	7	32.2	2.94
Burkeville†.....	68	9	34.7	4.50	Jewell† ¹	65	7	32.2	2.94
Burnside†.....	72	4	34.2	3.52	Leonardtown†.....	65	14	34.6	2.50
Caddo† ¹	72	4	34.2	2.75	McDonogh†.....	68	14	34.4	1.57
Canton† ¹	72	10	36.6	6.13	Mt. St. Mary's Col.†.....	63	9	31.2	2.00
Carrollton† ¹	68	8	31.2	1.00	New Market† ¹	58	10	30.4	2.57
Catlettsburg† ¹	57	12	34.6	3.12	Solomons† ¹	64	16	35.5	2.44
Earlington†.....	74	11	38.5	3.58	Taneytown†.....	.....	.....	.....	1.97
Eddyville†.....	66	6	34.4	4.09	Woodstock†.....	64	6	30.9	2.32
Edmonton†.....	66	6	34.4	5.50	Massachusetts.				
Falmouth†.....	66	6	34.4	1.78	Adams a.....	45	1	26.6	.....
Frankfort†.....	69	12	37.5	1.60	Adams b.....	.....	.....	.....	0.95
Franklin† ¹	69	12	37.5	7.62	Amherst†.....	43	-3	27.3	0.70
Greensburg†.....	68	-1	32.2	4.53	Amherst Ex. St'n a†.....	44	-1	26.4	1.02
Harrodsburg† ¹	68	-1	32.2	4.55	Amherst Ex. St'n b.....	46	-1	26.3	1.01
Hendricks†.....	59	-3	34.4	3.58	Andover†.....	48	-2	27.4	1.67
Lagrange†.....	69	4	33.6	1.84	Ashland.....	46	-3	26.4	1.11
Louisia†.....	69	1	33.6	3.58	Blue Hill (sum't.).....	46	-3	26.4	1.23
Matlock† ¹	70	10	36.5	7.72	Blue Hill (valley).....	47	0	27.1	1.24
Middleboro† ¹	64	8	35.0	3.04	Boston.....	47	0	27.1	1.24
Mount Sterling† ¹	67	4	31.0	3.75	Cambridge a.....	47	-4	27.7	1.23
Paducah a†.....	72	8	37.3	3.31	Cambridge b.....	46	0	28.2	1.23
Paducah b† ¹	72	8	37.3	3.31	Chestnut Hill.....	46	0	27.2	1.29
Pellville†.....	73	4	35.9	2.68	Clinton.....	46	0	27.2	0.75
Princeton†.....	73	6	34.9	4.07	Concord a†.....	46	-1	26.0	0.99
Robard.....	71	11	36.4	6.61	Dudley†.....	44	-3	25.0	1.64
Russellville† ¹	71	11	36.4	6.61	Egg Rock, Nahant.....	45	0	29.0	.....
Shelby City† ¹	69	4	32.0	2.66	Fall River a† ¹	50	5	29.2	2.07
Shelbyville† ¹	69	4	32.0	2.66	Fiskdale.....	40	-2	25.4	0.78
South Fork† ¹	68	-3	30.8	4.75	Fitchburg a† ¹	45	-2	25.7	0.86
Springfield†.....	68	-3	30.8	4.75	Fitchburg b.....	45	-2	25.7	0.86
Versailles.....	70	7	36.6	5.08	Framingham.....	45	-2	26.6	1.14
Wickliffe† ¹	70	7	36.6	5.08	Gilbertville.....	43	-1	24.3	1.39
Williamsburg a†.....	68	5	35.7	3.93	Groton a.....	43	-2	25.5	0.87
Williamsburg b†.....	68	5	35.7	3.93	Hingham.....	43	-2	25.5	0.87
Louisiana.					Hyannis† ¹	55	2	33.3	1.27
Abbeville.....	87	20	56.2	4.85	Kendall Green.....	44	0	27.6	1.29
Alexandria†.....	85	16	51.4	6.03	Lake Cochituate.....	49	-3	26.0	1.18
Amité.....	82	20	54.2	2.40	Lawrence.....	46	-2	26.1	1.04
Baton Rouge† ¹	77	19	52.1	5.18	Leicester.....	40	-4	24.4	0.95
Cameron†.....	86	13	52.5	4.07	Leominster† ¹	44	-1	26.8	0.87
Cheneyville†.....	86	22	54.0	5.24	Long Plain.....	50	-4	27.9	1.27
Clinton†.....	87	25	59.2	5.41	Lowell a.....	46	0	26.3	1.11
Coushatta a†.....	80	19	49.9	7.20	Lowell b.....	46	-2	26.2	.....
Coushatta b†.....	80	19	49.9	7.20	Lowell c.....	48	1	26.6	.....
Davis.....	75	15	46.6	6.62	Ludlow a.....	42	-5	22.7	2.15
Delhi†.....	78	20	56.4	6.04	Lynn a.....	46	1	27.9	1.62
Donaldsonville†.....	78	20	56.4	6.04	Lynn b.....	46	1	27.9	1.62
Emilie†.....	78	20	56.4	6.04	Mansfield† ¹	45	0	26.3	1.44
Farmerville.....	79	16	46.6	7.87	Middleboro.....	58	2	28.4	1.32
Franklin†.....	78	21	57.2	4.20	Milton† ¹	48	2	28.6	1.73
Girard†.....	80	23	55.4	4.63	Monroe.....	40	-8	22.0	1.75
Grand Coteau.....	80	23	55.4	4.63	Monson.....	44	-3	25.8	1.32
Homer†.....	75	14	46.0	9.08	Mount Nonotuck.....	44	-3	25.8	1.32
Houma†.....	80	20	54.9	3.87	Mystic Lake.....	44	-3	25.8	1.32
Lafayette†.....	82	20	55.6	4.95	Mystic Station.....	44	-3	25.8	1.32
Lake Charles† ¹	88	19	54.7	7.70	New Bedford a† ¹	50	1	28.5	1.66
Liberty Hill.....	82	16	48.0	7.61	New Bedford b.....	53	2	29.6	1.86
Marksville†.....	82	16	48.0	7.61	Newburyport a.....	47	-2	26.0	0.93
Manrepa.....	77	22	54.4	4.28	Newburyport b.....	47	-2	26.0	0.93
Melville†.....	83	20	55.2	3.55	North Billerica.....	47	2	29.0	1.34
Monroe†.....	76	18	49.6	9.77	Plymouth† ¹	52	4	31.2	1.77
Natchitoches†.....	81	16	49.2	6.51	Provincetown.....	51	2	31.8	1.68
New Iberia.....	77	20	54.8	4.42	Randolph.....	.....	.....	.....	0.65
N. La. Ex. Station.....	80	17	46.4	9.23	Roberts Dam.....	47	1	29.8	1.19
Paincourtville†.....	81	20	54.5	5.34	Roxbury.....	47	1	29.8	1.19
Plain Dealing.....	79	15	46.4	13.35	Royalston† ¹	46	0	28.9	0.95
Rayne†.....	81	19	55.0	3.54	Salem b.....	.....	.....	.....	1.30
Roseland.....	79	19	53.8	4.47	Savoy.....	54	6	26.3	.....
Schriever†.....	79	20	55.6	4.45	Somerset† ¹	54	0	29.3	1.39
Shell Beach.....	75	18	52.6	8.80	Springfield Arm'y.....	44	2	26.6	1.14
Sugar Ex. Station†.....	77	21	54.2	4.10	Taunton a†.....	54	1	28.8	1.77
Thibodeaux.....	80	20	55.6	4.52	Taunton b.....	54	1	28.8	1.77
Wallace.....	80	20	55.6	4.52	Taunton c.....	47	1	29.0	1.71
West End.....	80	20	55.6	4.52	Taunton d.....	55	0	28.2	1.00
Winnaboro.....	90	19	52.4	5.80	Turners Falls.....	44	0	27.6	1.00
Maine.					Wakefield.....	46	0	27.3	1.31
Bar Harbor.....	50	-6	.....	2.33	Waltham.....	.....	.....	.....	1.00
Belfast† ¹	42	-6	22.7	1.70	Webster.....	.....	.....	.....	1.31
Calais†.....	47	-6	22.8	1.63	Wellesley.....	46	0	26.4	1.11
Cornish† ¹	41	-7	22.4	1.38	Westboro†.....	45	0	27.4	1.16
East Machias†.....	49	-7	21.7	2.32	Worcester a.....	41	0	25.2	0.90
Fairfield.....	43	-9	20.2	1.10					

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Massachusetts—Con.	0	0	0	Ins.	Minnesota—Cont'd.	0	0	0	Ins.
Worcester b.....	45	-1	27.3	1.00	Saint Charles† ¹	42	-21	14.3	0.98
Michigan.					Saint Cloud† ¹	38	-20	13.5	.....
Adrian.....	51	-4	25.2	2.40	Saint Oloff† ¹	37	-26	7.0	0.75
Allegan.....	50	-9	25.2	3.19	Sandy Lake Dam†.....	35	-25	7.4	.....
Alma.....	37	-1	23.8	1.95	Sheldon† ¹	42	-14	18.2	1.13
Ann Arbor.....	48	-2	24.0	2.50	Winona† ¹	36	-11	14.2	.....
Arbela† ¹	44	-1	23.4	1.05	Mississippi.				
Ball Mountain.....	45	-4	24.6	1.28	Aberdeen†.....	.....	.....	.....	7.43
Bear Lake.....	38	1	23.4	3.27	Agricult'ral Col'ge.....	72	13	42.8	4.43
Benton Harbor.....	58	6	28.3	3.31	Batesville†.....	72	13	41.8	8.65
Berlin† ¹	42	-5	24.8	1.40	Briers.....	75	18	50.6	3.14
Berrien Springs a†.....	46	9	27.9	5.27	Brookhaven†.....	79	10	48.8	0.77
Berrien Springs b.....	45	-10	25.4	1.75	Canton†.....	75	17	48.0	6.22
Birch Run.....	45	-10	25.4	1.47	Clarkdale†.....	75	13	43.7	6.22
Birmingham†.....	50	0	26.3	1.63	Columbus a†.....	75	13	45.6	5.05
Boon†.....	33	0	20.7	2.95	Columbus b.....	75	13	45.6	5.05
Bronson.....	51	-8	24.5	1.15	Corinth†.....	75	13	45.6	5.05
Brown City.....	44	-5	24.0	1.30	Crystal Springs†.....	78	14	48.4	6.11
Caldwell.....	35	-2	21.6	1.95	Edwards†.....	78	14	48.3	6.71
Calumet.....	37	-14	17.4	2.52	Enterprise†.....	77	14	46.8	5.84
Charlevoix.....	41	8	24.4	2.55	Fayette†.....	77	10	50.4	3.85
Clinton.....	48	4	25.4	1.04	Greenville.....	73	14	45.0	6.54
Crystal Falls.....	33	-12	13.2	.....	Hattiesburg† ¹	85	20	54.5	5.08
Ewart.....	41	-5	23.8	1.16	Kosciusko†.....	78	13	44.3	6.10
Fairview.....	4				Lake†.....	73	10	44.2	5.13
Fitchburg.....	45	-10	23.6	2.33	Logtown†.....	75	20	53.6	3.29
Flint.....	48	-7	24.0	1.31	Louisville†.....	76	10	46.6	4.61
Freemont.....				1.63	Moss Point†.....	76	18	53.3	2.80
Gaylord.....	34	-4	20.4	3.20	Natchez†.....	78	17	50.8	3.37
Gladwin.....	42	-1	25.3	0.56	Okolona†.....	.....	.....	.....	4.55
Glenwood.....	48	6	26.6	1.72	Palo Alto†.....	76	13	43.9	4.45
Grape.....	55	-2	27.5	1.19	Pontotoc† ¹	77	11	42.1	8.83
Hanover.....	52	-6	27.6	2.04	Port Gibson†.....	83	14	48.8	6.55
Harbor Springs.....	40	0	23.6	1.49	Ship Island†.....	70	22	56.9	6.11
Harrisville.....	38	-5	22.6	4.34	Vaiden†.....	82	15	44.7	6.18
Hart.....	40	5	26.0	3.80	Washington†.....	75	17	50.0	4.43
Hayes.....	39	1	25.9	1.61	Water Valley† ¹	78	11	43.2	8.28
Highland Station.....	46	-8	23.2	1.52	Yazoo City†.....	.....	.....	.....	4.60
Hillsdale† ¹	48	-6	23.6	1.57	Missouri.				
Howell.....	46	-9	23.8	1.48	Appleton City†.....	72	-11	31.2	3.14
Ivan.....	37	0	23.2	2.34	Arthur.....	.....	.....	.....	3.01
Jeddo.....	41	-4	24.2	0.86	Bethany.....	56	-14	21.2	2.48
Kalamazoo.....	49	-2	25.0	1.97	Big Piney.....	.....	.....	.....	2.62
Lansing.....	56	-5	25.2	1.61	Boonville†.....	.....	.....	.....	3.57
Lathrop† ¹	36	-13	15.4	0.95	Brunswick.....	67	-5	29.0	0.55
Lewiston.....			1.54	1.55	Bryant.....	.....	.....	.....	2.35
McMillan.....	40	-7	19.9	1.47	Canton.....	.....	.....	.....	1.00
Madison.....	52	-5	25.1	1.47	Cape Girardeau†.....	.....	.....	.....	2.00
Marshall† ¹	47	-8	24.8	1.52	Carrollton†.....	68	-11	28.5	0.67
Mayville.....	43	-6	23.4	1.67	Carthage†.....	.....	.....	.....	5.05
Mottville.....	57	-11	24.8	1.54	Clinton† ¹	71	-12	29.8	2.40
Noble† ¹	49	6	26.4	1.41	Conception†.....	55	-18	25.2	1.70
North Marshall.....	45	-10	22.0	1.69	Concordia† ¹	72	-12	25.0	2.47
Olivet.....	47	-7	22.2	1.56	Cowgill.....	.....	.....	.....	2.10
Ovid.....	44	-3	24.0	1.82	Dadeville†.....	.....	.....	.....	3.22
Paris.....	38	-11	20.8	0.76	Larksville†.....	.....	-10	.....	1.15
Parkville.....			2.42	.....	East Lynne† ¹	69	-12	29.4	2.41
Rawsonville.....	46	-2	26.0	1.30	Edge Hill†.....	66	1	.....	4.36
Rockland† ¹	42	-11	16.7	0.60	Eldon† ¹	70	-6	32.0	2.48
Saint Ignace.....	37	-6	21.1	2.36	Edina.....	.....	.....	.....	1.36
Sand Beach.....	46	1	24.8	2.02	Farmersville.....	.....	.....	.....	1.89
Thornville† ¹	48	-2	26.0	1.41	Fayette.....	69	-9	30.0	1.88
Vandalia.....	52	-4	25.4	2.56	Fox Creek† ¹	66	-2	32.6	1.59
Washington.....	44	-3	25.8	1.21	Gaineville.....	66	-7	33.4	1.90
Weldon Creek.....	39	1	23.8	4.11	Gallatin† ¹	66	-14	25.9	1.22
White Pigeon† ¹	54	-10	23.0	1.40	Galt.....	.....	.....	.....	1.80
Williamston† ¹	50	0	26.6	0.65	Gayoso.....	.....	.....	.....	6.71
Ypsilanti.....	46	-2	25.9	1.58	Glasgow† ¹	68	-10	29.3	1.96
Minnesota.					Glensted.....	66	.....	.....	1.29
Ada.....	34	-29	2.1	0.17	Gordonville† ¹	66	7	36.3	2.94
Albert Lea† ¹	48	-20	14.9	0.44	Gorin.....	56	-5	28.8	1.64
Alexandria†.....			0.42	.....	Harrisonville†.....	68	-12	27.2	2.23
Alma City† ¹	46	-31	15.4	0.33	Hastain.....	.....	.....	.....	2.95
Ash Creek†.....	55	-20	15.8	0.19	Hermann†.....	.....	.....	.....	2.04
Bingham Lake† ¹	47	-23	13.8	0.09	Houston.....	74	-5	35.3	2.36
Bird Island.....	39	-23	13.8	0.70	Irena.....	.....	.....	.....	1.74
Blooming Prairie† ¹	50	-22	14.7	0.80	Ironton.....	.....	.....	.....	4.33
Bonniwells Mills†.....	45	.....	0.24	.....	Jefferson City†.....	71	-6	30.0	1.81
Cambridge†.....	38	-21	12.4	0.38	Jerome†.....	61	.....	.....	2.61
Camden† ¹	46	-22	15.6	0.10	Kidder.....	61	-17	23.8	0.90
Clear Lake† ¹	30	-20	12.0	0.30	Lamar†.....	71	-10	32.8	0.39
Collegetown.....	41	-21	15.6	0.28	Lamonte†.....	.....	-16	.....	2.36
Crookston†.....	35	-33	3.5	0.01	Langdon† ¹	58	-22	19.3	2.28
Eagle Bend†.....	38	-24	9.4	.....	Lebanon.....	72	-10	33.8	1.73
Easton†.....	48	-20	16.9	0.40	Lexington†.....	71	-13	29.6	1.84
Farmington†.....	40	-19	14.4	0.69	Liberty.....	66	-11	27.0	1.82
Fergus Falls† ¹	37	-25	10.7	0.31	Louisiana Bridge†.....	.....	.....	.....	1.57
Fort Ripley†.....			0.25	.....	McCune† ¹	59	-8	29.1	2.05
Grand Meadow† ¹	40	-24	13.6	.....	Mansfield.....	67	3	32.6	3.88
Granite Falls.....	44	-24	14.5	0.33	Marble Hill.....	67	-12	28.4	2.67
Holland† ¹	43	-22	12.9	0.40	Mexico†.....	62	-7	28.8	2.35
L Winnibigoshish†.....	34	-22	6.8	0.12	Mine La Motte.....	64	-3	35.2	3.87
Leech Lake† ¹	34	-33	6.0	0.21	Mound City† ¹	59	-12	22.7	1.40
Long Prairie† ¹	36	-26	8.2	.....	Mount Vernon.....	.....	.....	.....	3.72
Maple Plain† ¹	40	-13	15.2	0.70	Neosho.....	71	-12	33.3	1.30
Minneapolis† ¹	38	-18	14.6	0.84	New Boston.....	59	-10	22.1	0.68
Montevideo†.....	43	-25	14.5	0.62	New Hartford.....	.....	.....	.....	2.15
Morris†.....	37	-25	10.9	0.36	New Haven† ¹	64	-2	32.1	1.87
Northfield† ¹	41	-19	14.9	0.73	New Palestine.....	.....	.....	.....	1.21
Ortonville†.....			0.82	.....	Oakfield.....	65	-4	31.6	1.49
Pine River† ¹	34	-28	6.5	0.27	Oak Ridge† ¹	62	-3	32.9	1.62
Pokegama Falls† ¹	32	-37	5.2	0.24	Olden.....	70	-4	36.2	.....
Redwood Falls†.....			0.48	.....				
Rochester†.....	53	-17	16.7	.....				
Rolling Green† ¹	47	-23	14.7	0.55					

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
Missouri—Cont'd.	0	0	0	Ins.	Nebraska—Cont'd.	0	0	0	Ins.
Oregon a.....	61	-16	23.3	3.10	Stanton.....	47	-11	20.3	0.60
Oregon b†.....	59	-13	23.7	2.83	Superior.....	55	-6	27.9	0.20
Oto.....				3.20	Syracuse.....	57	-10	21.8	0.54
Palmyra.....				1.64	Table Rock*†.....	66	-14	21.4	1.96
Paris.....				0.51	Tekamah.....	57	-16	21.0	0.57
Phillipsburg.....	69	9	32.6	2.89	Turlington.....	60	-12	23.9	1.91
Pickering.....	58	-21	19.0	1.86	Weeping Water*†.....	54	-16	17.8	1.65
Platte River.....	62	-12	23.4	1.15	West Point.....	54	-10	20.1	0.70
Poplar Bluff.....	70	0	35.9	4.68	Whitman.....	50	0	24.6	0.75
Princeton.....	53	-14	23.4	2.10	Wilcox.....	56	-10	27.3	0.30
Roa.....	54	-14	21.0	1.44	Wilcox b*†.....	57	-12	24.5	1.12
Rolla.....				3.33	Nebraska.				
Saint Charles.....	62	-3	33.4	3.08	Austin.....	50	9	27.0	1.02
Saint Joseph.....				1.29	Battle Mountain*†.....	58	33.7	0.83	
Saint Louis.....	62	-3	31.4	2.33	Bellevue.....	62	10	26.6	0.25
Saint Louis b.....	65	-3	29.2	1.83	Belmont.....	45	-1	23.2	2.06
Saxoie.....				3.21	Beowawe.....	59	3	27.1	0.75
Sedalia.....	72	-15	29.1	3.80	Browns.....	51	15	34.8	0.81
Shelbina.....				1.80	Candelaria.....	46	10	30.6	0.43
Stanberry.....	56	-12	21.3	1.55	Carlin.....	54	3	29.0	1.55
Steelville.....	66	0	33.9	2.81	Carson City.....	62	3	30.2	1.89
Stellada.....	72	-14	30.4	2.21	Crane Ranch.....				0.92
Vanhook.....				1.84	Downeyville.....	61	8	35.0	0.56
Vermont.....	68	-9	29.9	2.37	Elko.....	50	0	25.8	1.40
Warrenton.....	64	-6	30.8	2.37	Elko (near).....	50	-8	25.2	1.08
Wellsville.....				1.85	Ely.....	50	-22	34.2	0.13
West Plains.....				1.00	Empire Ranch.....	50	5	29.1	1.60
Whiteside.....	60	-5	30.0	1.70	Fenelon.....	55	-1	24.0	0.70
Montana.					Golconda.....	54	6	29.7	0.70
Boulder.....	51	-23	21.6	0.19	Halleck.....	52	8	22.3	0.98
Bozeman.....	51	-17	20.0	0.97	Hawthorne.....	55	19	35.4	1.02
Camp Poplar River.....	35	-32	10.8	1.82	Hawthorne b.....	57	11	35.5	1.02
Cokedale.....	45	-24	21.2	2.50	Haw Springs.....	63	8	34.3	1.25
Elk Park.....	46	-25	15.4	1.53	Hemlock.....	68	13	38.3	0.90
Fort Keogh.....	47	-23	12.6	0.22	Lewers Ranch.....	57	10	31.5	5.51
Fort Logan.....	45	-27	19.7	0.99	Mill City.....	53	18	34.7	0.20
Fort Missoula.....	53	-14	21.2	2.20	Monitors Ranch.....	55	8	31.4	T.
Glendive.....	40	-25	13.6	1.30	Palisade.....	53	-14	22.2	0.60
Great Falls.....	60	-27	24.2	1.20	Palmetto.....	52	10	31.6	0.30
Hogan.....	44	-27	20.2	1.20	Picacho.....	55	0	39.6	1.75
Martinsdale.....	46	-26	22.5	0.32	Pioche.....	50	6	30.0	0.18
Virginia City.....	45	-10	21.0	1.95	Reno.....	60	11	34.8	1.65
Nebraska.					Saint State Univ'ly.....	63	6	32.4	2.61
Agee.....	64	-12	22.6	0.29	Saint Clair.....	62	6	31.7	0.85
Ansel.....	65	-19	23.4	0.20	South Camp.....	45	6	26.6	1.88
Arberville.....	52	-10	23.1	0.42	Stonel.....	45	-23	21.2	1.93
Arcadia.....				0.30	Sunnyside.....	48	-15	26.6	0.58
Ashland.....	55	-10	20.9	1.40	Tecoma.....	45	-2	22.2	0.85
Ashton.....	53	0	23.2	0.26	Toano.....	48	3	22.2	0.30
Bassett.....	70	-23	20.0	0.60	Tybo.....	52	5	30.0	1.31
Beatrice.....	58	-13	22.5	1.20	Verdi.....	55	7	31.4	6.41
Beaver City.....	58	-8	24.1	0.74	Virginia City.....	50	14	32.1	2.41
Bookwalter.....				1.60	Wabaska.....	60	12	44.9	1.48
Brandon.....				T.	Wadsworth.....	58	-1	31.5	0.67
Burwell.....	46	-16	18.2	0.75	Wells.....	52	-8	22.7	0.98
Callaway.....	61	-12	23.8	0.37	Winnemucca.....	55	8	30.9	0.81
Cornelia.....	61	-16	18.8	0.35	New Hampshire.				
Craigton.....	58	-16	18.8	0.15	Belmont.....	40	-14	16.2	1.03
Croft.....	59	-12	22.6	1.01	Berlin.....	40	-15	16.5	2.00
Culbertson.....				0.61	Berlin Mills.....	42	-13	17.4	1.39
David City.....	55	-14	18.3	1.20	Bethlehem.....	40	-12	17.4	0.70
De Soto.....	58	-15	21.3	1.72	Brookline.....	41	-7	21.0	1.04
Dunning.....	62	-4	24.4	0.20	Concord.....	41	-9	20.9	0.51
Ericson.....	65	-12	22.4	0.20	Durham.....	45	-4	26.6	0.77
Ewing.....				0.40	East Canterbury.....	40	-10	21.2	0.93
Fairbury.....	58	-6	29.8	1.04	Grafton.....	42	-10	20.4	0.89
Fairfield.....	51	1	25.4	0.60	Groveton.....	37	-12	17.8	0.96
Falls City.....				1.50	Hanover.....	40	-8	20.2	0.96
Fort Robinson.....	66	-18	25.2	0.50	Lakeport.....	43	-15	18.4	1.54
Fort Sidney.....	68	-20	25.7	0.50	Lancaster.....	45	-3	24.7	1.04
Franklin.....	56	-8	25.0	0.30	Manchester.....	45	-3	24.7	1.04
Fremont.....	56	-13	21.8	0.64	Mine Falls.....	45	-2	26.5	0.96
Geneva.....				0.85	Nashua.....	45	-6	24.9	1.08
Genoa.....	53	-12	22.0	0.76	North Conway.....	44	-12	21.4	0.65
Gering.....	68	-15	26.2	0.75	Peterboro.....	45	-4	23.8	0.95
Haigler.....	42	0	21.7	0.39	Plymouth.....	40	-11	19.8	0.95
Hartington.....	59	-18	19.6	0.64	Sanbornton.....	41	-10	21.0	0.75
Harvard.....	52	-10	22.2	0.35	Stratford.....	47	-14	21.0	1.33
Hastings.....	60	4	26.4	0.45	Walpole.....	44	-2	23.0	1.00
Hay Springs.....	60	-22	19.8	0.60	West Milan.....	35	-16	13.9	1.55
Hebron.....	55	-10	24.7	0.71	Weirs Bridge.....				0.93
Holdrege.....				0.73	Wolfboro.....				0.63
Imperial.....	62	-4	25.8	0.40	New Jersey.				
Indianola.....				0.60	Allaire.....	64	4	30.0	1.61
Kennedy.....	62	-7	22.5	0.86	Asbury Park.....	57	6	30.4	1.78
Kimball.....	68	-15	26.3	0.86	Barneget.....	59	8	31.0	1.44
Lexington.....	72	-12	28.8	0.80	Bayonne.....	52	8	30.4	1.60
Lincoln.....	56	-12	22.8	1.46	Bellevue.....	45	3	27.8	1.81
Madrid.....	56	-15	21.4	0.43	Beverly.....	68	7	29.7	1.96
Marguerite.....	51	-12	20.6	0.50	Bivalve.....	49	10	26.2	1.70
Minden.....	54	-10	23.5	0.60	Blairtown.....	49	3	26.2	1.71
Nebraska City.....	80	-13	21.8	0.50	Boonton.....				1.30
Nesbit.....	54	-16	20.9	0.43	Bridgeton.....	62	13	33.4	2.47
Norfolk.....	58	-13	23.3	0.20	Butler.....				1.64
North Loup.....	58	-14	18.9	0.39	Camden.....	65	10	30.9	2.09
O'Neill.....	62	-18	20.0	0.70	Cape May.....	55	10	33.1	2.58
Oughb.....				0.20	Dover.....	49	1	27.0	1.44
Palmer.....	54	-16	21.4	0.35	Egg Harbor City.....	60	8	30.6	2.17
Plattsburgh.....				1.79	Elizabeth.....	52	6	28.8	1.57
Ravenna.....	58	-13	22.0	0.35	Franklinville.....	64	5	29.9	2.13
Red Cloud.....				0.60	Freehold.....	63	6	31.0	1.68
Santee Agency.....	62	-13	21.7	0.24					
Seward.....	60	0	25.1	0.50					
Springview.....	62	-14	20.8	0.58					

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean.			Max.	Min.	Mean.	
<i>New Jersey—Cont'd.</i>	°	°	°	<i>Ins.</i>	<i>New York—Cont'd.</i>	°	°	°	<i>Ins.</i>
Friesburg.....	52	4	28.6	1.43	Ithaca.....	55	-4	27.4	0.85
Gillette.....				2.25	Jamestown*†.....	53	0	27.2	.....
Hammon.....				1.35	Kings Station.....				1.45
Hanover.....	50	3	28.7	1.67	Lebanon Springs.....	46	-6	22.7	0.78
Highland Park.....	63	6	29.8	1.36	Le Roy.....	48	-4	24.0	3.26
Hightstown.....	64	6	29.2	3.04	Lockport.....	51	-2	26.4	1.17
Imlaystown.....	67	6	31.0	1.73	Lowville.....	42	-17	19.0	1.80
Junction.....				1.54	Lyndonville.....				1.24
Lambertville.....	62	6	29.9	1.41	Lyons.....	48	4	27.7	1.38
Locktown.....	60	4	29.0	1.99	Lyon Mountain.....	46	-19	17.7	.....
Moorestown.....	66	8	30.1	1.33	Madison Barracks.....	51	-12	23.0	1.42
Mount Holly.....	67	9	31.3	1.69	Malone.....	44	-20	17.5	2.19
Newark.....	50	6	30.0	1.44	Middletown.....	43	4	25.0	1.35
Newark b.....	51	7	30.6	1.79	Minnewaska.....	44	-2	22.0	1.35
New Brunswick.....	64	5	29.9	1.68	Mount Morris.....	54	-4	27.9	.....
New Brunswick b.....	61	5	30.2	1.77	Newark Valley.....				0.77
Newton.....	46	1	25.2	3.09	New Lisbon*†.....	47	-11	21.6	1.00
Ocean City.....	55	9	32.2	1.94	N'th Hamond.....	48	-15	21.1	0.95
Oceanic.....	60	10	32.7	1.65	Number Four.....	42	-20	16.5	3.28
Paterason.....	50	9	31.0	2.13	Ogdensburg.....	44	-15	20.1	1.83
Penns Grove.....	65	14	34.4	1.30	Oxford.....	43	-8	22.4	1.27
Pennsauken.....				1.56	Palermo*†.....	43	-10	23.1	1.35
Plainfield.....	59	6	30.0	2.13	Perry City.....	49	-14	23.4	0.78
Rancocas*†.....	65	8	29.0	2.04	Phenix.....				4.00
Readington*†.....	56	10	34.2	2.27	Plattsburg B'ks.....	42	-14	19.6	1.44
River Vale*†.....	66	2	32.4	2.27	Port Jervis.....	48	0	26.0	1.42
Salem.....	60	12	33.4	1.51	Potsdam.....	44	-19	18.2	1.26
Somerville.....	60	1	29.7	1.63	Poughkeepsie.....	48	-1	25.9	1.21
South Orange*†.....	52	6	29.2	2.37	Quaker Street.....	39	-7	21.1	1.21
Tenafly.....	51	2	28.6	1.49	Romulus.....	50	-2	28.6	0.61
Toms River.....	64	3	29.4	2.04	Rondout.....	42	4	26.9	1.07
Trenton*†.....	66	9	34.0	1.77	Schoharie Depot.....				0.92
Vineland.....	63	10	30.5	2.30	Setauket*†.....	52	9	31.4	1.56
Whiting.....	64	6	30.8	0.89	South Canisteo.....	51	-6	23.9	1.01
Woodbine.....	60	6	30.2	0.11	South East Res'voir.....				1.06
<i>New Mexico.</i>				0.29	South Kortright.....	51	-8	21.0	1.11
Alburt.....	70	11	37.6	0.29	Turin.....	39	-14	20.7	2.99
Albuquerque.....	67	15	36.8	0.11	Utica.....	35	-10	22.5	1.98
Bloomfield.....	61	1	27.8	1.77	Wappingers Falls.....				1.76
Chama.....	62	-9	26.0	1.00	Watertown.....	49	-16	21.9	2.65
Coolidge.....	54	-8	20.0	0.19	Watkins.....	51	-7	24.6	1.15
Deming*†.....	79	25	50.1	0.60	Wedgwood.....	48	-6	22.6	0.71
Embudo.....	64	0	29.0	0.60	West Chazy.....				1.38
Estalina Springs.....	57	-6	29.8	0.61	West Point.....	49	8	29.7	1.33
Folsom.....	65	-4	27.0	0.25	Willels Point.....	62	6	30.6	1.66
Fort Bayard.....	68	10	37.5	0.61					
Fort Wingate.....	70	1	31.2	0.70	<i>North Carolina.</i>				
Gallinas Spring.....	65	10	35.8	0.30	Asheville.....	69	4	37.2	1.60
Halls Peak.....	54	-10	26.9	1.13	Auburn.....				3.38
Hillsboro.....	68	8	38.8	0.52	Bakersville.....	70	-1	36.8	1.02
La Luz.....	72	24	44.1	1.21	Bryson City.....				3.32
Lordsburg*†.....	70	18	40.0	0.12	Chapel Hill.....	68	6	39.1	2.77
Los Lunas.....	62	12	32.3	1.25	Columbus.....	64	18	39.2	1.59
Monero.....	49	-13	21.0	0.81	Douglas.....	69	1	37.2	3.21
Olio.....	60	0	28.4	0.27	Fayetteville.....				3.57
Pojuaque.....				0.35	Highlands*†.....	58	12	35.6	2.85
Socorro.....	69	11	35.5	0.26	Horse Cove.....	64	16	39.6	2.85
Springer.....	65	-5	27.4	0.63	Lenoir*†.....	65	10	37.7	1.50
Taos.....	57	-12	21.8	0.68	Littleton.....	68	7	38.1	3.43
<i>New York.</i>				0.48	Louisburg.....	67	2	37.5	3.52
Adams Center.....				1.55	Marion.....	70	12	39.6	0.76
Addison.....	52	-5	25.7	0.52	Mount Airy.....	67	10	37.5	1.52
Akron.....				1.85	Mount Holly.....				2.85
Alfred Center.....	46	-8	20.7	1.13	Mount Pleasant.....	69	6	39.9	2.78
Amersand.....	43	-20	16.4	1.77	Murphy.....				3.55
Angelic*†.....	47	-3	22.6	0.68	Newbern.....	65	14	39.1	2.35
Arcade.....	48	-4	21.7	0.68	Oak Ridge.....	67	12	38.8	1.92
Arkwright.....	51	4	25.3	0.68	Pittsboro.....	74	-4	37.4	3.00
Atlanta.....				1.41	Rockingham.....	74	7	44.4	3.64
Avon.....				1.06	Roxboro.....	66	7	39.1	2.17
Baldwinsville.....	44	0	25.1	1.27	Salisbury.....	64	18	42.2	2.06
Bedford.....				1.21	Saxon.....	68	5	37.4	1.85
Bethlehem Center.....				1.15	Smithfield.....	69	5	40.0	4.14
Binghamton*†.....	48	-10	24.5	1.05	Soapstone M't.....	68	5	39.0	2.31
Bollivar.....				1.15	Southern Pines.....	72	7	39.2	4.05
Boys Corners*†.....	44	7	28.7	1.65	Tarboro.....	72	2	40.5	4.10
Brentwood.....	49	-4	26.4	2.47	Washington.....	76	3	39.9	3.27
Brookport.....	52	1	26.1	1.27	Weldon.....	70	2	38.4	3.46
Brookfield.....	43	-10	21.6	1.84	Willelton.....	72	3	37.0	1.70
Canaseraga.....				1.09					
Canton*†.....	47	-17	19.4	0.79	<i>North Dakota.</i>				
Carmel.....	46	1	26.1	0.40	Ashley.....	49	-20	9.4	0.08
Chenango Forks.....				3.43	Bottineau.....	30 ^f	-35 ^f	2.3 ^f	T.
Cherry Creek.....				1.15	Churches Ferry.....	33	-28	2.5	0.37
Constableville*†.....	49	-13	21.4	1.53	Dickinson.....	52	-15	13.6	0.38
Cooperstown.....	39	-7	21.7	1.08	Ellendale.....	40	-21	9.0	0.36
Cornland.....	42	-1	25.8	1.77	Fargo.....	38	-27	5.4	0.12
De Kalb Junction.....				2.97	Forman.....	41	-10	15.2	0.70
Demster.....				0.25	Fort Stevenson.....	36	-27	9.8	0.52
Deposit.....				1.05	Fort Yates.....	43	-15	15.6	0.48
Dunkirk b.....	54	7	27.5	0.74	Gallatin*†.....	36	-32	1.0	0.68
Easton.....				0.68	Grafton.....	32	-32	1.2	T.
Eden Center.....	57	-1	26.6	0.75	Grand Forks*†.....	35	-31	3.2	0.26
Ellis.....				0.70	Grand Rapids*†.....	35	-27	9.3	0.28
Factoryville*†.....	54	-10	25.6	1.01	Lakota.....	32	-32	2.3	.....
Fleming.....	48	0	25.2	0.80	Medora.....	60	-25	18.0	0.62
Fort Niagara.....	52	4	29.4	1.31	Milton.....	25	-36	0.6	0.20
Galway.....				1.31	Napoleon.....	36	-23	8.4	0.37
Geneva*†.....	50	-2	26.8	1.15	Power*†.....	40	-26	5.7	0.41
Glens Falls.....	41	-6	22.1	1.34	Sykeston.....	47 ^d	-29	10.3 ^d	0.20
Gloversville.....	38	-5	21.3	1.52	Wahpeton.....	50	-25	9.5	0.30
Hess Road Stat'n*†.....	51	0	26.1	1.02	Wild Rice.....				4.2
Honeymead Brook.....	47	-2	24.9	1.95	Willow City.....	35	-29	1.0	0.00
Humphrey.....	46	0	24.2	1.02	Woodbridge.....	30	-39	2.0	T.
Italy Hill.....	43	-1	22.3	0.82	Yule.....	50	-25	14.0	0.85

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Ohio.	°	°	°	Ins.	Oklahoma Ter.	°	°	°	Ins.
Akron ¹	65	0	28.5	1.50	Anadarko ¹	72	5	37.0	3.05
Annapolis.....	61	2	27.3	1.50	Burnett ¹	75	5	37.0	3.83
Ashland.....	61	2	27.3	1.55	Fort Reno ¹	70	0	35.8	4.40
Athens ¹	70	1	32.0 ^d	1.47	Fort Sill ¹	72	8	37.7	2.98
Auburn.....	59	3	26.7	1.82	Gate City ¹	75	0	26.6	1.37
Bangorville ¹	63	0	26.8	2.26	Guthrie ¹	74	2	38.2	4.52
Bennet ¹	63	2	26.0	1.07	Mangum ¹	78	12	38.6	1.79
Benton Ridge.....	63	2	26.0	1.05	Ponca ¹	74	4	33.9	3.94
Bethany.....	63	2	26.0	1.37	Sac & Fox Agency ¹	73	0	36.4	4.77
Bissells.....	63	2	26.0	0.86	Winnview ¹	73	0	36.4	3.29
Bloom Center.....	63	2	26.0	1.59	Oregon.				
Caledonia ¹	63	2	26.0	1.58	Albany ¹	55	25	37.5	9.09
Campbellstown.....	63	2	26.0	1.86	Albany ¹	55	25	37.5	9.09
Camp Dennison.....	63	2	26.0	1.10	Arlington ¹	52	6	32.6	2.88
Canton ¹	67	1	28.1	1.54	Ashland ¹	50	17	34.6	4.36
Cardington.....	67	1	28.1	1.61	Aurora ¹	58	27	40.8	2.34
Carrollton.....	67	1	28.1	2.24	Bandon ¹	50	31	45.1	17.17
Cedarville.....	67	1	28.1	1.36	Beulah ¹	56	1	39.8	0.88
Celina ¹	67	1	28.1	1.80	Brownsville ¹	58	17	39.1	7.30
Cherry Fork.....	67	1	28.1	1.99	Burns ¹	52	1	25.8	0.16
Chicago.....	67	1	28.1	1.69	Canyon City ¹	50	9	37.0	1.10
Circleville ¹	67	1	28.1	1.40	Comstock ¹	52	20	37.0	4.63
Clarksville ¹	67	1	28.1	1.29	Corvallis ¹	54	23	36.4	6.20
Cleveland ¹	66	4	29.3	1.54	Corvallis ¹	54	23	36.4	3.72
Coalton.....	66	4	29.3	0.91	Corvallis (near) ¹	53	23	36.0	8.46
Colebrook.....	66	4	29.3	1.18	Crook ¹	53	23	36.0	1.90
Dayton ¹	67	6	31.3	1.57	East Portland ¹	52	22	36.0	2.65
Demos ¹	68	2	28.6	1.11	Eugene.....	60	23	40.0	7.39
Ellsworth.....	68	2	28.6	1.14	Gardiner.....	61	27	43.9	14.42
Elyria.....	65	1	28.5	1.09	Glenora.....	49	20	36.4	17.83
Findlay ¹	64	7	27.7	1.88	Grants Pass ¹	74	32	45.1	4.32
Forestburg ¹	64	2	28.4	2.17	Happy Valley ¹	61	5	31.1	1.05
Frankfort.....	64	2	28.4	1.25	Heppner ¹	61	5	31.1	1.76
Garrettsville ¹	67	12	26.0	1.62	Hood River (near) ¹	46	8	33.5	10.94
Georgetown ¹	69	6	31.8	2.51	Hubbard.....	62	24	40.4	6.56
Granville ¹	68	5	27.8	1.05	Jacksonville.....	50	19	36.0	3.60
Gratiot ¹	68	2	29.0	2.02	Joseph ¹	62	18	24.9	2.29
Greenfield.....	65	0	30.8	1.55	Junction City ¹	55	26	41.3	3.43
Green Hill.....	65	0	30.8	1.41	Lafayette ¹	55	18	38.8	6.42
Greenville ¹	62	3	28.3	2.02	La Grande ¹	57	11	27.6	0.90
Hackney.....	62	3	28.3	2.48	Lakeview ¹	62	3	30.2	2.47
Hanging Rock ¹	70	1	30.6	2.62	Langlois.....	63	29	47.4	13.56
Harbor ¹	64	4	29.5	1.46	Leland ¹	52	24	35.9	9.93
Hedges.....	64	4	29.5	2.08	Lone Rock.....	53	24	35.9	1.63
Hillhouse.....	64	4	29.5	2.08	McMinnville ¹	53	22	37.2	6.61
Hillsboro.....	64	4	29.5	1.71	McMinnville ¹	53	22	37.2	5.59
Hiram ¹	65	1	25.9	1.32	Monmouth ¹	52	26	38.2	2.33
Jacksonboro ¹	65	1	25.9	1.75	Mount Angel ¹	57	26	38.8	6.23
Kenton ¹	65	1	25.9	1.88	Newberg.....	52	22	38.5	5.50
Killbuck.....	66	2	27.2	1.62	New Bridge.....	53	10	35.2	0.44
Leipsic.....	66	2	27.2	1.28	Newport.....	53	10	35.2	7.59
Levering.....	66	2	27.2	2.25	Pendleton.....	60	1	31.6	1.10
Logan ¹	64	1	30.0	2.11	Portland ¹	55	22	37.3	6.90
Lordstown ¹	64	4	26.5	1.21	Riddles ¹	54	28	39.2	5.48
McConnellsville ¹	70	6	29.0	2.53	Roseburg ¹	64	23	41.6	3.75
McLurey.....	70	6	29.0	2.26	Salem ¹	52	24	39.5	4.20
Mansfield ¹	66	1	26.0	1.60	Salem ¹	52	24	39.5	6.08
Marietta ¹	66	1	26.0	2.02	Sheridan ¹	54	26	39.7	5.91
Marietta ¹	70	6	29.2	2.42	Silverton ¹	56	18	37.2	5.47
Marion ¹	65	4	27.9	1.22	Siskiyou ¹	56	20	34.4	2.85
Millford.....	65	4	27.9	1.64	Sparta.....	54	1	25.6	2.85
Montpelier ¹	55	3	25.5	1.74	Springfield ¹	58	21	38.2	6.60
Mountville.....	55	3	25.5	1.60	The Dalles ¹	52	2	34.2	5.04
New Alexandria ¹	66	2	29.0	2.55	Tillamook R'k L. H.	52	2	34.2	6.11
New Berlin.....	66	2	29.0	0.94	Toledo.....	61	23	42.7	9.54
New Comerstown ¹	66	6	27.7	1.69	Vale.....	56	5	29.8	0.95
New Holland.....	63	4	27.5	1.94	Vernonia ¹	49	24	37.6	9.63
North Lewisburg ¹	63	3	29.1	1.27	West Fork ¹	60	28	38.5	7.66
North Royalton.....	63	3	29.1	1.27	Williams.....	61	18	37.6	5.38
Oberlin ¹	65	3	27.4	1.91	Pennsylvania.				
O. S. University ¹	64	0	28.9	1.85	Aqueduct ¹	54	7	30.2	1.23
Orangeville.....	63	7	27.2	1.05	Blooming Grove ¹	54	7	30.2	1.23
Pataskala.....	66	4	28.6	2.51	Bloomsburg.....	60	1	28.3	0.94
Plattsburg.....	66	4	28.6	2.51	Blue Knob ¹	53	3	24.1	4.37
Pomeroy ¹	69	1	31.4	1.20	Brookville ¹	60	3	28.4	1.45
Portsmouth ¹	68	6	32.2	2.38	Carlisle ¹	60	3	28.4	1.62
Portsmouth ¹	68	6	32.2	1.96	Clarion ¹	63	5	29.0	2.52
Ridge.....	68	6	32.2	2.43	Coatesville ¹	63	5	29.0	2.06
Rittman.....	68	6	32.2	0.96	Confluence ¹	56	8	24.8	2.05
Sharon Center.....	65	0	27.9	0.67	Corry.....	56	8	24.8	2.05
Shenandoah.....	65	0	27.9	1.47	Davis Island Dam ¹	56	8	24.8	2.05
Shepherdstown.....	65	0	27.9	1.02	Drifton ¹	51	1	28.6	1.76
Sidney ¹	65	0	27.9	1.53	Du Bois ¹	51	1	28.6	1.76
Springboro.....	65	0	27.9	1.02	Dyberry ¹	41	5	22.6	1.66
Strongsville.....	65	0	27.9	1.06	East Mauch Chunk.....	50	3	27.5	1.26
Sylvania.....	65	0	27.9	1.32	Easton ¹	54	5	25.2	1.62
Thurman.....	65	0	27.9	1.36	Edinboro ¹	55	9	25.2	0.94
Tiffin ¹	64	0	27.9	1.43	Emporium ¹	51	2	24.8	0.61
Tyrone.....	64	0	27.9	1.43	F'ks of Nesheim ¹	51	2	24.8	0.61
Upper Sandusky ¹	62	2	29.1	1.56	Frederick.....	51	2	24.8	0.61
Vancsburg.....	62	2	29.1	1.82	Freeport ¹	51	2	24.8	0.61
Van Wert.....	63	5	26.9	1.67	Gettysburg ¹	51	2	24.8	0.61
Wauseon ¹	59	7	25.5	1.91	Girardville ¹	52	2	29.4	1.36
Waverly ¹	59	7	25.5	2.10	Grampian ¹	48	0	24.6	1.51
Waynesville.....	69	3	30.7	1.15	Greensboro ¹	48	0	24.6	1.51
Westerville ¹	62 ^h	8 ^h	33.7 ^h	1.56	Hamburg.....	55	8	26.8	1.33
West Milton ¹	63	3	27.1	1.75	Holidaysburg ¹	53	0	26.9	1.97
Weymouth.....	65	8	27.1	1.35	Honesdale ¹	44	1	24.7	1.74
Wheeler ¹	61	2	28.0	1.74	Huntingdon ¹	55	1	29.2	1.55
Wooster ¹	61	2	28.0	1.74	Johnstown ¹	63	4	28.6	2.51
Wooster ¹	61	2	28.0	1.74	Kane.....	51	2	22.1	0.61
Youngstown ¹	65	5	27.7	1.32	Kennett Square ¹	61	4	32.5	1.39
Zanesville ¹	65	5	27.7	2.06	Kilmer ¹	61	4	32.5	1.39
					Lansdale.....	61	4	32.5	1.57

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
Pennsylvania—Con.					S. Dakota—Cont'd.				
Lebanon ¹	61	0	29.9	1.96	Traverse ¹	56	24	13.0	0.60
Le Roy ¹	50	3	24.1	0.93	Tyndall ¹	65	14	21.2	0.20
Lewisburg	49	0	28.4	0.70	Webster ¹	45	25	14.6	0.90
Ligonier ¹	69	13	27.3	2.12	Wentworth ¹	49	21	12.8	0.36
Lock Haven ¹	52	5	27.2	1.35	Wessington Sp'gs ¹	46	16	15.8	0.72
Lock No. 4 ¹				2.16	Wolsey ¹	43	16	14.2	0.37
McConnellsburg ¹	62	4	30.6	1.55	Tennessee.				
Mahoning ¹				1.40	Andersonville ¹	57	8	35.9	5.60
Newcastle ¹	68	5	29.2	1.02	Ashwood ¹	68	10	39.4	7.22
Oil City ¹				0.95	Austin ¹	69	7	30.4	4.99
Ottaville				1.79	Bethel Springs ¹	69	12	42.8	9.21
Parker ¹				1.63	Byrdstown ¹	69	11	38.8	2.07
Philadelphia ^b	64	10	33.2	2.21	Carthage ¹				4.15
Philadelphia ^c	63	10	32.0	1.96	Charleston ¹				4.04
Phoenixville	64	6	30.4	2.00	Clarksville ¹	72	7	37.0	9.93
Point Pleasant				1.87	Clinton ¹				3.41
Pottstown	64	7	30.8	1.94	Columbia ¹				7.25
Quakertown ¹	62	2	27.9	1.95	Covington ^b	73	10	39.2	12.60
Reading ²				1.46	Dunlap				6.89
Ridgway ¹				1.04	Fayetteville [*]	69	12	37.9	3.78
Saegertown	62	11	24.3	2.90	Florence Station ¹	69	14	36.8	4.89
Salem Corners ¹	46	0	23.1	2.18	Franklin ¹	70	9	37.8	6.23
Saltsburg ¹				2.49	Greenville ¹	61	11	30.3	2.45
Seisholtzville				2.35	Hohenwald ¹	74	6		9.27
Selins Grove ¹	46	2	28.0	1.90	Jacksboro ¹			34.0	3.10
Smiths Corners				1.69	Jackson ¹	70	9	38.8	11.91
Somerses ¹	64	10	25.8	3.32	Johnsonville ¹				9.79
South Eaton	50	3	26.2	0.86	Kingston ¹				3.56
State College ¹	50	4	26.6	1.07	Lookout Mountain ¹	63	7	35.8	4.31
Stoyestown ¹				2.18	Loudon ¹				3.49
Swarthmore	63	8	28.4	1.21	Lynnville ¹	62	10	37.9	6.72
Uniontown ¹	68	5	31.3	1.55	Missionary Ridge ¹		12	37.4	
Warren ¹				2.36	Newport ¹		10	34.2	1.46
Wellsboro ¹	46	9	24.0	0.40	Nunnally ¹	70	9	38.5	8.89
West Chester	62	6	29.6	2.39	Parksville ¹	65	11	39.8	3.57
West Newton ¹				2.20	Riddlett ¹	73	9	36.2	5.03
Westtown	62	6	29.4	2.27	Rockwood ¹				3.91
Wilkesbarre ¹	57	2	28.6	1.53	Rogersville ¹	60	10		3.44
Wysox ¹	53	7	26.0	1.28	Rugby ¹	65	5	34.3	3.82
York	65	1	28.8	2.13	Savannah ¹	69	12	38.4	9.24
Rhode Island.					Sharp ¹	68	6	39.4	6.81
Bristol ¹	51	4	30.5	1.37	Springdale ¹	70	6	37.4	2.87
Kingston a	53	0	27.6	1.93	Strawberry Plains ¹				2.90
Kingston b ¹	53	0	28.8	2.02	Sweetwater ¹	68	8	37.4	3.13
Lonsdale				1.31	Waynesboro ¹	67	9	37.2	7.22
Newport	52	5	32.0		Texas.				
Olneyville	45	2	31.4		Albany ¹	75	21	41.3	2.87
Pawtucket	48	4	31.3	1.21	Arlington ¹	85	15	46.0	3.06
Providence a	46	4	30.0	1.50	Alice ¹	82			3.21
Providence b	47	1	28.1	1.53	Arthur City ¹				4.81
Providence c	44	1	28.0	1.43	Aurora ¹	87	15	45.2	3.04
South Carolina.					Austin ^a	80	20	49.8	8.49
Aiken ¹	72	22	46.6	1.67	Austin ^b	80	23	51.3	
Anderson ¹				2.91	Boerne ¹		19	45.2	4.86
Camden ¹				2.52	Brazoria ¹	81	20	55.7	3.36
Cheraw a ¹	76	6	43.6	3.53	Brenham ¹	81	20	54.8	9.29
Cheraw b ¹				2.79	Brownwood ¹	80	18	46.6	1.55
Effingham ¹				3.42	Burnet ¹	75	24	49.6	3.01
Greenville ¹				2.70	Camp Eagle Pass	80	25	51.9	0.81
Greenwood ¹				5.81	Camp P. Colorado	80	5	45.1	2.50
Kitchens Mills ¹	75	18	47.8	1.68	Childress ¹	74	13	35.8	0.93
Longshore ¹	70	20	44.6	4.24	Coldwater ¹	76	0	30.3	0.80
Mount Carmel ¹				3.06	College Station	83	20	53.2	11.03
Nichols ¹				2.05	Columbia ¹	81	20	56.0	1.65
Port Royal ¹	72	27	53.0	2.05	Coriscana ^a				4.05
Saint Stephens ¹				1.72	Coriscana ^b	78	14	46.4	5.66
Simpsonville ¹	68	15	43.3	3.54	Cuerpo ¹	83	21	59.2	3.38
Society Hill ¹	73	14	45.0	3.76	Devine	79	22	51.7	2.19
Statesburg ¹	73	19	46.4	1.76	Durham ¹				0.40
Tillers Ferry ¹				2.43	Duval ¹	87	21	51.6	7.40
Trial	75	17	44.5	1.60	Eastland ¹	82	16	43.2	2.74
Waterloo ¹				2.51	Flower Bluff ¹	80	28	62.2	1.69
Winnabow ¹	73	14	44.1	3.02	Forestburg ¹	82	10	42.6	3.47
Yorkville	70	19	46.0	2.94	Fort Brown ¹	85	29	63.3	1.19
South Dakota.					Fort Clark	77	25	51.6	0.55
Alexandria ¹	56	20	16.6	0.50	Fort Hancock	77	3	38.2	0.15
Bowdle ¹	50	18	14.0	0.20	Fort McIntosh	80	25	56.4	1.30
Britton ¹	40	23	8.7	0.32	Fort Ringgold	89	28	58.6	1.70
Brookings ¹	64	19	20.1	0.32	Fredericksburg ¹	80	18	47.4	3.53
Carthage				0.15	Gainesville ¹	79 ^a	12	44.2	5.74
Castlewood ¹	45	21	13.6	0.30	Graham ¹	79	17	44.0	2.24
Cross ¹	58	14	22.2	0.26	Grape Vine ¹	80	13	44.8	3.02
De Smet ¹	42	22	14.4	0.20	Hallettsville ¹	81	17	51.5	3.21
Elkton ¹	42	22	11.6	0.21	Hartley ¹	72	3	30.0	0.74
Faulkton ¹	44	16	13.1	0.38	Houston ¹	78	19	53.4	2.71
Flandreau ¹	49	20	15.2	0.38	Huntsville ¹	80	18	54.9	5.96
Forestburg ¹	46	13	17.8	0.32	Kent				0.77
Fort Meade	67	19	22.6	1.54	Lgrange ¹	90	24	53.1	5.20
Fort Sully	52	14	16.0	0.72	Laredo ¹				0.24
Frankfort ¹	44	22	13.5	0.35	Llano ¹	80	24	51.9	1.17
Gary ¹	45	23	13.8	0.20	Luling ¹	87	21	54.4	3.10
Hotch City ¹	54	16	14.6	0.40	McGregor ¹	72	16	40.2	5.20
Kimball ¹	52	17	16.6	0.30	Menardville ¹	80	20	44.6	1.34
Mellette ¹	50	15	17.9	0.20	Mesquite ¹	80	14	45.3	5.27
Millbank ¹	45	18	14.2	0.73	Mountain Spring ¹	79	12	44.6	5.80
Mitchell ¹	50	16	18.0	0.98	New Braunfels ¹	80	22	51.4	4.98
Delrieh ¹	64	14	21.3	1.15	Ochiltree ¹				1.10
Onida ¹	46	17	13.1	0.01	Orange ¹	77	30	53.0	2.95
Parker ¹	52	19	16.6	0.30	Paris ¹	78	9	46.6	5.90
Parkston ¹	48	19	17.3	0.50	Red River City ¹				5.59
Piedmont				0.90	Rio Grande City ¹	81			0.82
Plankinton ¹		17	15.6	0.12	Roby ¹	81	16	42.2	1.35
Rosebud ¹	64	13	20.2	0.80	Round Rock ¹	82	20	51.6	4.64
Sioux Falls ¹	51	18	17.0	0.30	San Antonio ^b	79	23	53.2	3.51
Spearfish ¹	61	17	23.2	1.57	Seymour ¹				1.30

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
<i>Texas—Cont'd.</i>				<i>Ins.</i>	<i>Washington—Cont'd.</i>				<i>Ins.</i>
Sierra Blanca a†	73	15	42.9	.....	Vashon ²	48	2	44.8	3.40
Silver Falls†	80 ⁴	16 ⁴	37.6 ⁴	0.92	Waterville†	45	2	31.4	2.70
Sulphur Springs†	82	13	45.6	0.00	<i>West Virginia.</i>				
Temple†	79	15	46.5	5.35	Bluefield†	64	0	34.0	2.00
Twohig†	90	.....	.....	1.10	Buckhannon a†	70	-10	28.4	.....
Victoria a†	79	23	54.9 ²	2.91	Buckhannon b†	70	-6	31.9	2.59
Waco†	83	18	50.0	3.33	Central Station a†	70	-6	31.9	2.59
<i>Utah.</i>					Charleston a†	67	4	33.8	2.35 ⁷
Beaver†	47	8	26.4	1.75	Danville ²	67	4	33.8	2.35 ⁷
Blue Creek a†	47	8	26.4	1.75	Ellis†	66	-2	28.6	1.89
Castle Gate†	60	-1	27.4	1.41	Fairmont†	69	-6	29.4	2.20
Cisco†	63	2	29.4	0.51	Glenville†	69	-6	29.4	2.20
Corinne ²	50	-5	28.2	2.30	Grafton†	71	-5	30.0	3.00
Deseret†	58	-11	22.5	0.86	Harpers Ferry†	68	-2	28.6	1.89
Fillmore†	63	-5	28.3	1.20	Hinton†	69	0	31.5	3.05
Fort Du Chese.	.....	.....	.....	.....	Huntington†	66	-5	26.4	3.09
Grouse Creek†	.....	.....	.....	.....	Kingwood a†	65	11	35.2	2.49
Kelton ²	52	5	28.1	0.05	Martinsburg†	71	-8	30.8	1.93
Lake Park	55	-1	26.8	2.63	Morgantown a†	72	-2	32.4	1.41
Levan†	.....	.....	.....	.....	Morgantown b a†	72	-2	32.4	1.41
Loa†	53	-19	22.2	0.25	New Cumberland	68	0	29.0	2.93
Logan	57	-13	24.6	1.70 ⁴	New Martinsville†	68	3	34.4	2.99
Lonec†	57	-1	25.4	0.20	Nuttallburg	69	3	31.8	1.73
Manti†	58	-13	18.6	0.00	Parkersburg†	66	-6	27.8	4.06
Moab†	66	5	31.1	0.41	Philippi†	66	-6	27.8	4.06
Mount Carmel a†	60	11	31.3	0.59	Pleasant Hill ²	66	-6	27.8	4.06
Ogden a ²	58	2	31.1	3.05	Point Pleasant†	.....	.....	.....	.....
Ogden b†	.....	.....	.....	.....	Rowlesburg†	.....	.....	.....	.....
Parowan†	.....	.....	.....	.....	Spencer†	78	-6	37.2	3.22
Promontory ²	48	0	27.4	0.40	Tannery ²	70	-8	27.4	.....
Provo City†	.....	.....	.....	.....	Weston†	.....	.....	.....	.....
Richfield†	60	-12	24.1	0.52	Wheeling a†	.....	.....	.....	.....
Snowville†	57	14	22.8	1.59	Wheeling b†	70	2	33.1	1.09
Stockton†	.....	.....	.....	.....	White Sul. Springs†	.....	.....	.....	.....
Terrace ²	49	8	28.3	0.50	<i>Wisconsin.</i>				
Thistle†	.....	.....	.....	.....	Amherst	35	-19	14.3	0.85
<i>Vermont.</i>					Appleton†	36	-10	16.2	1.28
Brattleboro a	44	0	26.2	0.93	Baraboo†	40	-14	17.6	1.74
Burlington†	40	-10	23.2	1.00	Barron†	40	-21	11.5	0.71
Chelsea ²	34	-16	10.5	1.24	Bayfield	42	-12	15.8	0.44
Cornwall	.....	.....	.....	.....	Beaver Dam	38	-14	17.1	1.88
Enosburg Falls†	44	-14	17.6	2.40	Black River Falls†	50	-22	12.9	1.19
Hartland†	41	-10	19.3	1.26	Butternut†	36	-26	8.4	0.59
Hyde Park	43	-15	17.9	1.44	Cadia ²	.....	.....	.....	.....
Jacksonville	43	-8	23.6	1.18	Centralia	44	-18	15.2	0.56
Norwich	.....	.....	.....	.....	Chippewa Falls†	.....	.....	.....	.....
Simonsville	36	-11	18.4	.....	Columbus	38	-18	16.2	1.91
South Royalton ²	42	-9	18.7	0.76	Crandon†	34 ²	19 ²	13.4 ²	1.12
Stratford ²	38	-13	19.5	1.55	Delavan (near)†	45	-14	18.0	1.16
Vernon ²	40	-4	23.6	1.07	Depere	36	-10	16.2	1.72
Wells	40	-12	19.4	1.07	Eau Claire a	39	-16	14.0	1.00
Woodstock	41	-12	18.9	1.39	Embarrass ² †	38	-18	14.0	1.17
<i>Virginia.</i>					Florence†	34	-15	14.3	0.86
Abingdon†	.....	.....	.....	.....	Fond du Lac†	37	-11	14.4	1.10
Ashland†	73	12	36.3	0.64	Grantsburg†	36	-15	13.9	0.80
Avon†	67	7	35.6	2.21	Hammond†	41	-17	16.0	1.38
Bedford City†	65	17	37.7	1.58	Harvey†	37	-13	16.6	2.30
Big Stone Gap†	65	3	32.3	3.65	Hillsboro	42	-20	12.8	1.40
Birdsneat ² †	67	14	37.9	3.65	Hudson	47	-14	16.8	1.22
Blacksburg†	65	11	33.9	0.51	Janesville	42	-9	18.1	1.10
Buchanan†	.....	.....	.....	.....	Juneau†	38	-16	15.4	2.10
Charlottesville	67	15	38.4	2.19	Koepnick ² †	44	-20	15.8	0.75
Christiansburg†	.....	.....	.....	.....	Lincoln ²	.....	.....	.....	.....
Clarksville†	.....	.....	.....	.....	Madison†	38	-9	18.3	2.19
Dale Enterprise†	67	1	30.8	2.71	Manitowoc†	39	-10	20.5	1.69
Danville†	.....	.....	.....	.....	Meadow Valley†	38	-17	14.0	0.93
Emporia†	.....	.....	.....	.....	Medford a†	.....	.....	.....	.....
Falls Church†	.....	.....	.....	.....	Medford b†	38	-20	13.2	0.50
Irwin†	.....	.....	.....	.....	Menomonie	45	-15	13.2	1.09
Lexington†	67	6	33.9	1.76	Mineral Point	45	-15	13.2	1.09
Marion†	65	2	34.4	1.88	Neillsville†	38	-20	14.5	0.85
Nottaway	69	8	36.3	1.60	New Holstein†	37	-12	15.0	0.65
Petersburg†	70	8	36.9	1.68	Oconomowoc†	40	-21	16.4	2.26
Richmond a†	74	9	38.9	1.42	Oconto	43	-7	17.8	1.17
Richmond b†	.....	.....	.....	.....	Osceola†	40	-20	12.4	0.63
Riverton†	.....	.....	.....	.....	Oshkosh†	42	-10	17.4	1.44
Salem†	64	15	38.6	1.34	Pepin	34 ²	17	10.1	0.97
Saluda†	70	12	36.9	1.92	Portage†	.....	.....	.....	.....
Spottsville†	70	0	35.5	2.72	Port Washington	47	-13	20.8	0.63
Standardsville†	68	13	35.7	2.27	Prairie du Chien	52	-16	18.1	1.47
Staunton†	67	5	33.2	2.45	Raymond	42	-13	18.6	2.76
Stephens City	66	9	33.1	2.79	Reedsburg†	43	-22	15.2	1.18
Warsaw†	68	12	35.8	1.94	Rhineland ²	34	-18	13.9	0.53
Woodstock†	.....	.....	.....	.....	Sharon†	43	-13	19.0	2.30
Wytheville†	64	6	34.2	0.93	Shawano	38	-13	17.4	0.77
<i>Washington.</i>					Shell Lake	41	-17	11.6	0.67
Aberdeen†	60	25	40.4	8.57	Sparta b†	41	-22	14.3	1.84
Chehalis†	50	24	37.9	6.42	Valley Junction†	39	-22	12.2	0.97
Chelan†	49	9	25.6	2.39	Viroqua	40	-15	14.6	1.39
Clyde†	51	10	33.1	2.89	Watertown	39	-22	15.0	2.09
Colfax†	47	-16	26.4	3.95	Waukesha†	.....	.....	.....	.....
East Sound†	52	16	39.2	3.29	Westfield†	37	-14	15.9	1.07
Ferry†	.....	.....	.....	.....	Weston a†	.....	.....	.....	.....
Fort Simcoe	50	8	29.8	3.35	Whitehall†	50	-22	18.6	0.80
Fort Spokane	44	3	25.8	3.97	<i>Wyoming.</i>				
Fort Townsend	50	18	38.0	3.42	Big Horn Ranch†	56	-23	20.2	0.54
Madrone†	52	25	39.8	7.56	Camp Pilot Butte	52	-27	16.0	1.40
Moxee Valley†	46	1	27.4	1.15	Casper†	41 ⁴	34 ⁴	18.6 ⁴	0.80
Olga†	52	22	39.5	2.84	Evanston†	43	-24	15.4	1.33
Pine Hill ²	48	4	33.1	6.11	Fort McKinney	62	-21	25.1	0.80
Pomeroy†	57	0	33.4	3.23	Fort Washakie	56	-26	16.4	1.04
Rosalie†	48	0	26.8	2.94	Fort Yellowstone	40	-14	16.2	2.17
Seattle†	54	26	42.0	4.92	Lander	53	-21	21.5	1.36
Silver Creek ²	49	20	36.7	6.06	Laramie b	51	-16	20.6	0.20
Tacoma†	53	22	38.8	5.84	Lusk†	57	-14	22.7	0.05

Meteorological record of voluntary observers, &c.—Continued.

Stations.	Temperature. (Fahrenheit.)			Precip'n.	Stations.	Temperature. (Fahrenheit.)			Precip'n.
	Max.	Min.	Mean			Max.	Min.	Mean	
<i>Wyoming—Cont'd.</i>				<i>Ins.</i>	<i>Mexico—Cont'd.</i>				<i>Ins.</i>
Saratoga†	54	-26	17.6	0.63	Puebla ¹	72	35	58.5	0.00
Sundance	54	-23	19.3	1.40	Topolobampo ²	80 ²	44	58.2	0.06
Wheatland†	80	-20	35.8	0.20	<i>Newfoundland.</i>				
<i>Canada.</i>					St. John's	.....	.....	.....	1.73
Fort Francis, Ont.	45	-38	3.0	0.99	<i>West Indies.</i>				
Leon de Aldamas ¹	74	41	57.2	0.34	Grand Turk Island	.....	.....	.....	0.14
					Hamilton, Ber ¹	75	50	64.1	2.76

Reports received too late to be used in general discussion of weather for December, 1892.

<i>California.</i>					<i>Kansas.</i>				
Santa Cruz a ²	73	35	53.7	8.48	Eldorado†	78 ²	-8 ²	31.4 ²	1.73
<i>Colorado.</i>					<i>Missouri.</i>				
Fort Collins†	66	-17	23.0	0.35	Grove Dale	75	-5	37.6	1.79
Idaho Springs†	56	-14	25.4	0.79	Warrensburg ²	71	-9	30.0	2.58
Lay†	56	-23	20.6	1.07	<i>Nebraska.</i>				
Longmont†	56	-18	20.5	0.78	State Farm	59	-12	20.8	1.36
<i>Florida.</i>					Cent'l Pk., N.Y. City†	58	10	32.2	1.30
Saint Andrews Bay†	75	24	54.6	3.75	North Carolina.				
<i>Iowa.</i>					Currituck Inlet†	.....	.....	.....	3.51
Emmetsburg	.....	-18	.....	0.25					

Received too late for publication in November, 1892.

<i>Alabama.</i>					<i>New Hampshire.</i>								
Florence b†.....	76	22	51.7	5.49	Durham.....	65	15	37.6	3.87				
Jasper†.....	79	24	49.7	5.70	<i>New Jersey.</i>								
Tuscaloosa†.....	77	29	51.6	.....	Lambertville.....	67	20	41.6	8.01				
Tuscombiana*1.....	75	24	48.3	5.80	<i>New Mexico.</i>								
<i>California.</i>					Deming*1.....	86	43	61.2	1.80				
Edgwood*1.....	56	23	38.4	5.35	<i>North Dakota.</i>								
Fouts Springs.....	.....	.....	.....	10.25	Power*†1.....	62	-10	21.4	T.				
Kono Tayee.....	.....	.....	.....	6.53	<i>Pennsylvania.</i>								
Mountain View.....	.....	.....	.....	5.68	Doylestown.....	.....	.....	.....	7.51				
Sanger.....	.....	.....	.....	0.38	Fk's of Neshaminy.....	.....	.....	.....	6.77				
Summit.....	.....	.....	.....	8.80	Frederick.....	.....	.....	.....	6.55				
<i>Colorado.</i>					Lansdale.....	.....	.....	.....	7.15				
Fort Collins†.....	67	11	37.4	0.23	Ottsville.....	.....	.....	.....	6.88				
Idaho Springs†.....	62	12	36.2	0.73	Point Pleasant.....	.....	.....	.....	6.85				
Livermore.....	63	14	36.9	0.37	Seisholtzville.....	.....	.....	.....	6.73				
<i>Kansas.</i>					Smiths Corners.....	.....	.....	.....	7.51				
Leoti†.....	73	9	39.6	T.	<i>Utah.</i>								
<i>Michigan.</i>					Corinne*1.....	68	0	38.0	1.05				
Berrien Springs a*1.....	61	20	38.0	3.50	Mount Carmel*†1.....	.....	9	34.6	T.				
<i>Minnesota.</i>					Sciofield†1.....	62	5	28.6	.....			
Greenville†.....	77 ^f	28 ^f	53.1 ^f	2.63	<i>Mario.</i>								
<i>Nebraska.</i>					Maastlan.....	83	62	73.0	0.00				
Nebraska City*†1.....	82	18	42.1	0.55	Mexico.....	75	36	55.2	0.16				
					Vera Cruz.....	85	60	74.4	6.22				

Data from Canadian stations for the month of December, 1892.

Station.	Pressure.			Temperature.		Precipitation.		Prevailing direction of wind.
	Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Total.	Departure from normal.	
Saint John's, N. F.	29.56	29.71	.....	27.2	- 3.2	3.84	.....	nw.
Sydney, C. B. I.	29.68	29.74	.....	26.6	- 2.4	2.92	- 1.80	sw.
Halifax, N. S.	29.71	29.85	.....	25.8	- 2.7	3.02	- 2.27	nw.
Grand Manan, N. B.	29.82	29.87	.....	26.6	.....	3.16	- 1.51	w.
Yarmouth, N. S.	29.81	29.89	.....	28.6	- 2.9	4.55	- 0.72	n.
Saint Andrews, N. B.	29.80	29.85	.....	22.4	.....	2.39	- 1.17	nw.
Charlottetown, P. E. I.	29.75	29.79	.....	23.6	.....	1.54	- 2.46	w.
Chatham, N. B.	29.80	29.82	.....	17.8	+ 1.3	2.91	- 0.06	w.
Father Point, Que.	29.81	29.84	.....	17.3	+ 1.3	2.07	- 0.15	nw.
Quebec, Que.	29.59	29.95	.....	15.0	- 1.0	1.13	- 3.18	w.
Montreal, Que.	29.77	29.99	.....	17.7	- 1.8	2.00	- 1.56	sw.
Rockliffe, Ont.	29.46	30.01	.....	11.7	- 2.8	2.32	- 0.42	nw.
Kingston, Ont.	29.70	30.04	.....	21.0	- 4.0	1.71	- 1.93	w.
Toronto, Ont.	29.68	30.08	.....	25.2	- 2.8	1.24	- 1.30	w.
White River, Ont.	28.62	30.09	.....	1.6	.....	0.20	.....	w.
Port Stanley, Ont.	29.42	30.09	.....	25.6	.....	1.62	- 0.99	w.
Saugeen, Ont.	29.30	30.05	.....	25.4	- 1.6	5.40	+ 1.27	w.
Parry Sound, Ont.	29.30	30.04	.....	18.8	- 2.2	4.76	+ 0.83	n.
Port Arthur, Ont.	29.30	30.05	.....	8.8	- 1.7	0.30	- 0.55	w.
Winnipeg, Man.	29.22	30.13	.....	- 1.9	- 4.9	0.10	- 1.09	w.

Data from Canadian stations for the month of December, 1892—Continued.

Station.	Pressure.			Temperature.		Precipitation.		Prevailing direction of wind.
	Mean not reduced.	Mean reduced.	Departure from normal.	Mean.	Departure from normal.	Total.	Departure from normal.	
Minnedosa, Man.	28.13	30.11	.....	- 2.0	- 4.5	0.15	- 0.58	w.
Qu'Appelle, Assiniboia.	27.67	30.13	.....	0.4	- 3.6	0.33	- 0.31	sw.
Medicine Hat, Assiniboia.	27.68	30.15	.....	10.8	- 4.2	1.42	+ 1.06	w.
Swift Current, Assiniboia.	27.40	30.17	.....	7.8	- 3.2	3.00	+ 2.29	nw.
Calgary, Alberta.	26.38	30.13	.....	12.0	- 2.5	0.09	- 0.60	nw.
Prince Albert, Saskatch'n.	28.44	30.11	.....	- 3.8	.....	0.39	- 0.01	nw.
Spences Bridge, B. C.	29.34	30.22	.....	21.4	.....	1.12	.....	e.
Edmonton, Alberta.	27.62	30.13	.....	8.1	- 7.8	0.82	.....	nw.
Battleford, Saskatchew'n.	28.22	30.08	.....	7.3	.....	0.09	.....	w.
Grindstone, Gulf St. L. ....	.....	.....	.....	.....	.....	.....	.....	.....
September, 1892.	.....	.....	.....	.....	.....	.....	.....	.....
Sable Island.	30.10	.....	.....	61.4	.....	1.13	.....	w.
October, 1892.	.....	.....	.....	.....	.....	.....	.....	.....
Sable Island.	29.72	.....	.....	51.0	.....	4.77	.....	w.
Hamilton, Bermuda.	29.84	30.00	.....	70.9	.....	17.73	.....	ne.
November, 1892.	.....	.....	.....	.....	.....	.....	.....	.....
Sable Island.	29.98	.....	.....	44.5	.....	7.27	.....	se.
Sandy Point.	30.00	30.02	.....	37.6	.....	0.84	.....	e.
Prince Albert.	28.38	30.00	.....	11.0	.....	0.48	.....	n.

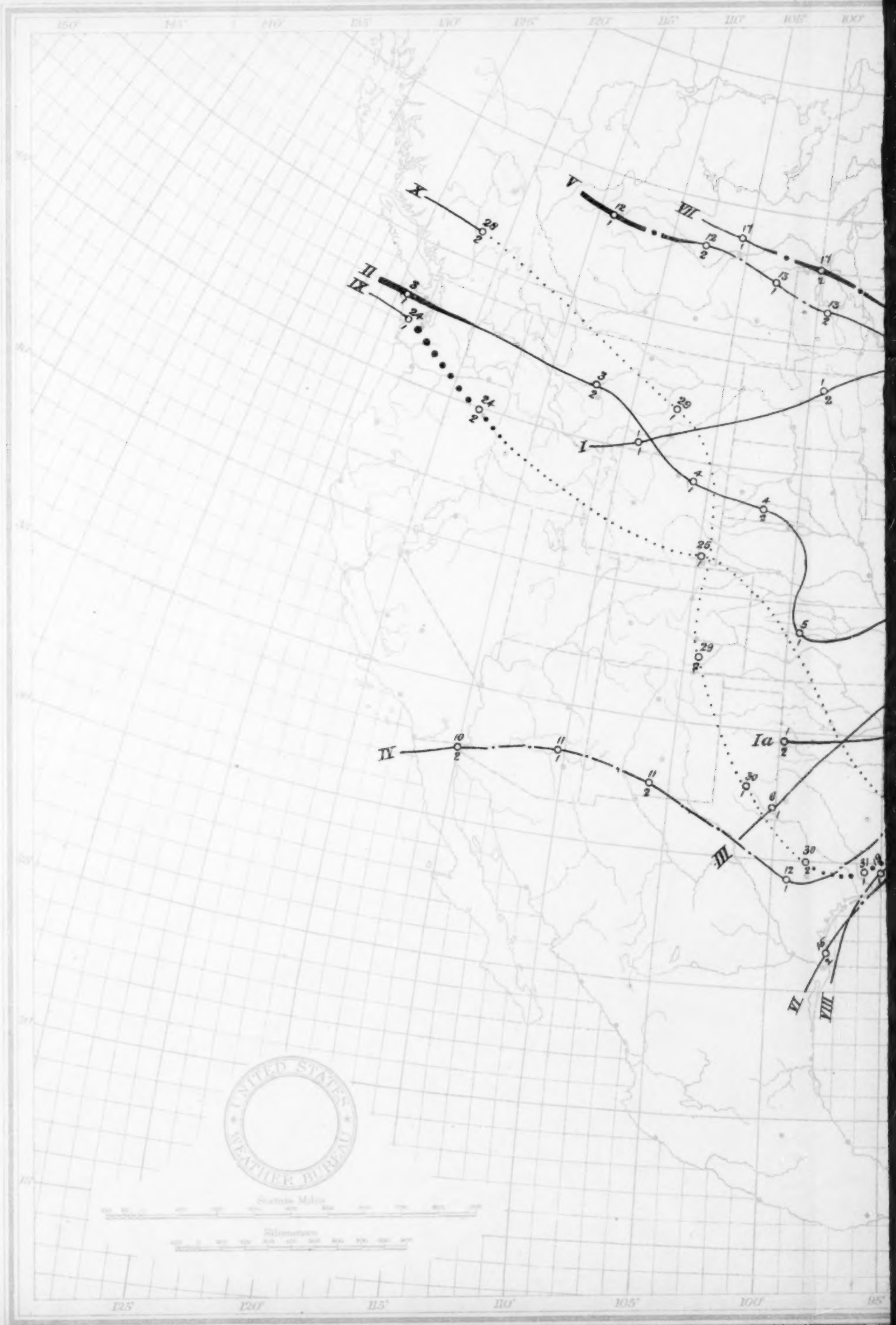
Table of miscellaneous meteorological data for December, 1892—Weather Bureau observations—Continued.

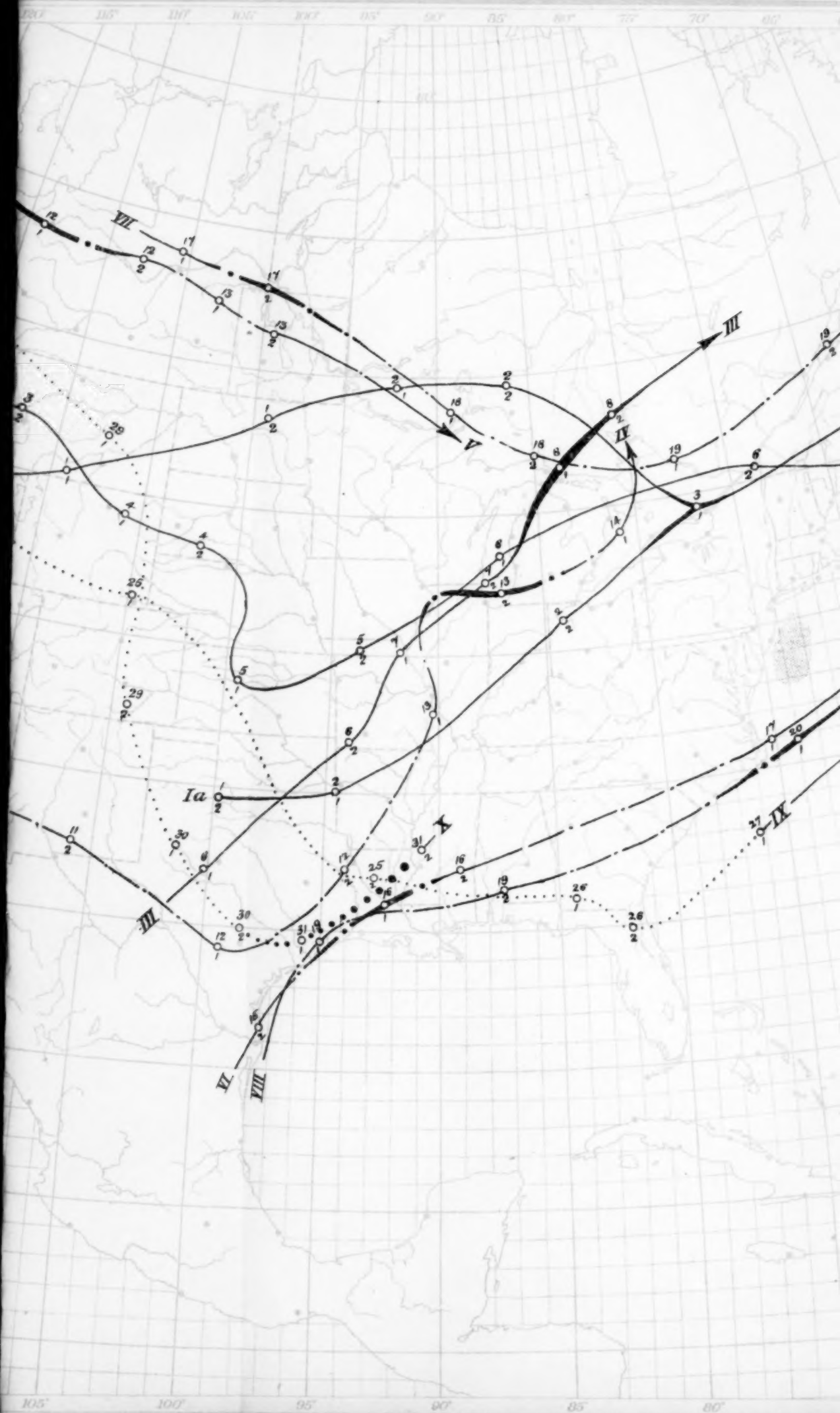
Districts and sta- tions.	Elevation above level, feet.	Length of record, years.	Pressure, in inches.		Temperature of the air, in degrees Fahrenheit.					Humidity and precipitation.					Wind.				Mean tempera- ture data since opening of station.													
			Mean pressure, 8 a. m. and 8 p. m. + 2.	Mean reduced.	Departure from normal.	Mean max. and min. + 2.	Departure from normal.	Maximum. Date.	Minimum. Date.	Greatest daily range.	Mean tempera- ture of the dew-point.	Mean relative humidity, per cent.	Precipitation, in inches.	Departure from normal.	Days with or more.	Total move- ment, miles.	Prevailing direc- tion.	Miles per hour.	Direction.	Date	Cloudless days.	Partly cloudy days.	Cloudy days.	Average cloudiness, tenths.	Highest for month.	Year.	Lowest for month.	Year.				
Ex. Northwest—Con.																																
Fort Buford	1,899	14	28.00	30.18	+ .01	27.6	- 5.4	37	3	18	-25	22	- 2	33	3	77	1.33	+ 0.7	16	5,102	w.	36	w.	13	3	13	15	7.0	26.0	1890	- 3.3	1879
Upper Miss. Valley.																																
Minneapolis	758	22	29.26	30.16	+ .06	25.7	- 5.4	45	2	24	-16	26	10	26	0.75	- 0.7	7	4,951	nw.	29	nw.	14	11	6	14	6.2	33.6	1877	8.2	1876		
Red Wing	850	22	29.18	30.17	+ .06	25.5	- 5.4	44	2	21	-17	26	9	24	0.53	- 0.7	8	4,990	nw.	24	nw.	7	6	14	11	6.1	33.6	1877	8.2	1876		
Saint Paul	720	21	29.33	30.16	+ .06	25.9	- 5.4	45	3	25	-14	28	9	31	1.04	- 0.3	12	4,299	s.	30	nw.	25	6	12	13	6.5	39.2	1877	8.5	1872		
La Crosse	613	21	29.48	30.19	+ .06	26.4	- 5.4	52	3	26	-10	26	15	22	2.73	+ 1.0	11	5,943	w.	32	e.	7	8	9	14	6.3	42.5	1877	15.4	1876		
Davenport	869	15	29.18	30.18	+ .03	25.6	- 5.4	54	3	27	-16	26	12	29	1.95	+ 0.4	10	4,890	nw.	32	n.	7	9	7	15	5.8	39.6	1889	18.4	1884		
Des Moines	651	20	29.40	30.15	+ .04	25.9	- 5.4	52	3	24	-16	26	12	26	2.08	+ 0.2	8	3,256	w.	20	ne.	7	3	13	15	5.8	40.0	1877	13.7	1876		
Dubuque	613	23	29.45	30.15	+ .02	25.9	- 5.4	52	3	27	-16	26	12	29	1.50	+ 0.6	6	4,221	nw.	26	nw.	8	10	6	15	5.9	42.9	1877	18.8	1876		
Keokuk	359	22	29.76	30.16	+ .01	26.0	- 5.4	53	3	24	-16	26	12	26	3.91	+ 0.5	13	5,797	se.	45	sw.	7	7	6	18	6.9	54.1	1889	27.3	1876		
Cairo	644	14	29.42	30.15	+ .00	28.4	- 4.9	59	6	35	- 7	26	22	25	1.78	- 1.0	7	6,329	nw.	34	sw.	7	7	11	13	6.5	44.4	1889	26.0	1880		
Springfield, Ill.	534	22	29.54	30.14	+ .01	28.6	- 5.4	59	6	36	- 7	26	22	25	1.63	- 1.0	8	5,517	nw.	34	sw.	18	6	7	18	6.9	54.1	1889	26.0	1880		
Hannibal	571	22	29.50	30.14	+ .01	28.0	- 5.4	63	6	39	- 2	26	27	24	1.92	- 0.4	10	7,882	se.	42	sw.	7	8	5	18	6.5	49.8	1889	24.9	1876		
Missouri Valley.																																
Columbia	963	5	29.08	30.17	+ .02	27.1	- 5.4	59	5	34	-13	26	30	25	2.28	- 0.7	7	4,665	sw.	36	sw.	7	7	9	15	6.6	46.4	1889	27.1	1892		
Kansas City	1,356	7	28.64	30.13	+ .02	23.0	- 4.0	72	5	39	-10	26	27	27	3.10	+ 0.6	13	6,512	se.	38	w.	7	5	8	18	6.9	51.8	1889	31.5	1888		
Springfield, Mo.	857	22	29.22	30.20	+ .02	26.0	- 7.0	67	5	33	-11	26	19	29	1.77	+ 0.2	6	5,154	nw.	40	nw.	7	7	8	16	7.1	45.3	1889	21.0	1872		
Leavenworth	857	22	29.22	30.20	+ .02	26.0	- 7.0	67	5	33	-11	26	19	29	1.77	+ 0.2	6	5,154	nw.	40	nw.	7	7	8	16	7.1	45.3	1889	21.0	1872		
Topeka	1,113	22	28.94	30.20	+ .00	26.4	- 5.4	59	5	34	-10	26	15	31	1.92	- 0.7	9	4,478	nw.	32	nw.	7	11	8	12	6.3	39.4	1889	17.3	1882		
Omaha	1,113	22	28.94	30.20	+ .00	26.4	- 5.4	59	5	34	-10	26	15	31	1.92	- 0.7	9	4,478	nw.	32	nw.	7	11	8	12	6.3	39.4	1889	17.3	1882		
Crete	2,613	8	27.29	30.19	+ .06	22.4	- 3.5	63	3	32	-12	26	13	36	1.01	- 0.7	7	4,176	nw.	35	nw.	13	4	14	13	6.9	35.6	1889	22.4	1886		
Valentine	1,165	22	28.84	30.16	+ .02	20.8	- 5.4	57	3	29	-16	26	12	30	0.20	- 0.2	13	6,844	s.	42	n.	7	9	5	17	6.4	35.6	1889	22.4	1882		
Sioux City	1,470	22	28.50	30.18	+ .02	17.2	- 5.4	51	2	26	-13	26	8	36	0.39	- 0.2	6	4,319	nw.	26	w.	14	12	9	10	5.5	35.6	1889	19.2	1884		
Pierre	1,310	12	28.66	30.17	+ .02	15.0	- 3.2	48	4	24	-19	26	6	39	0.36	- 0.4	9	7,500	nw.	34	se.	1	7	11	13	6.0	27.9	1881	8.6	1884		
Huron	1,470	12	28.66	30.17	+ .02	15.0	- 3.2	48	4	24	-19	26	6	39	0.36	- 0.4	9	7,500	nw.	34	se.	1	7	11	13	6.0	27.9	1881	8.6	1884		
Yankton	1,232	20	28.78	30.18	+ .01	20.7	- 0.5	62	3	29	-15	26	12	32	0.18	- 0.6	8	6,004	nw.	38	nw.	7	5	10	16	6.9	34.4	1889	11.8	1884		
Northern Slope.																																
Havre	2,477	13	27.38	30.17	+ .02	11.0	- 6.7	40	31	20	-22	22	2	39	1.18	+ 0.5	13	7,331	w.	38	sw.	31	5	13	13	6.5	33.0	1885	3.5	1884		
Miles City	2,374	13	27.50	30.16	+ .02	15.0	- 0.9	47	26	23	-19	26	7	32	0.56	- 0.5	12	4,589	sw.	24	w.	8	8	10	13	6.1	31.1	1885	7.0	1884		
Helena	4,118	13	25.80	30.19	+ .02	24.4	+ 0.7	47	26	30	-22	22	19	34	0.56	- 0.5	14	5,937	sw.	36	sw.	15	5	9	17	6.8	31.1	1885	7.0	1884		
Rapid City	3,280	7	26.61	30.16	+ .02	22.4	- 9.0	65	1	31	-11	22	14	35	0.48	+ 0.2	9	5,567	w.	36	nw.	1	7	10	14	6.2	35.2	1889	22.4	1882		
Cheyenne	6,105	22	23.92	30.23	+ .06	25.3	- 4.2	58	1	35	-17	21	16	51	0.89	+ 0.7	8	7,949	nw.	56	w.	22	11	15	5	4.4	35.6	1889	18.8	1884		
Lander	5,377	22	24.00	30.27	+ .02	15.8	- 5.4	50	3	29	-29	22	2	69	1.60	- 0.2	10	2,585	sw.	48	sw.	1	17	10	4	3.5	35.6	1889	22.4	1882		
Kearney	2,173	22	27.74	30.15	+ .02	24.0	- 5.4	56	4	32	-10	26	16	29	0.60	- 0.2	10	8,423	sw.	42	nw.	7	8	6	17	6.3	35.6	1889	22.4	1882		
North Platte	2,841	19	27.10	30.22	+ .02	23.6	- 4.1	60	4	34	-10	21	14	38	0.42	- 0.3	5	5,999	w.	36	nw.	7	8	12	11	5.8	37.2	1889	15.0	1879		
Middle Slope.																																
Denver	5,287	22	24.69	30.24	+ .06	26.8	- 7.2	67	1	38	- 9	22	16	46	1.32	+ 0.7	8	5,252	s.	36	nw.	25	9	16	8	5.0	40.5	1889	22.6	1878		
Pikes Peak	14,096	16	17.50	30.17	+ .02	1.2	- 1.2	24	6	10	- 2	16	4	22	20.51	+ 0.5	15	24,822	w.	94	w.	22	12	7	12	5.1	9.8	1875	- 0.3	1878		
Pueblo	4,734	5	25.23	30.19	+ .02	27.1	- 6.9	69	1	38	-18	15	16	47	1.02	- 0.2	6	4,886	w.	38	w.	1	13	15	3	4.0	42.8	1889	27.1	1892		
Concordia	1,410	8	26.62	30.21	+ .06	24.9	- 7.6	57	5	33	- 8	26	17	33	1.19	+ 0.4	8	4,181	n.	28	n.	7	5	13	13	6.5	42.0	1889	24.2	1886		
Dodge City	2,523	19	27.41	30.19	+ .01	25.6	- 7.5	66	4	34	- 6	26	17	42	1.38	+ 0.7	7	6,240	se.	39	se.	29	5	17	9	6.0	44.6	1889	21.0	1884		
Wichita	1,399	22	28.65	30.18	+ .02	27.6	- 6.9	67	5	35	- 6	26	17	27	1.71	- 0.2	12	5,398	n.	36	n.	7	10	10	11	6.0	40.0	1889	21.0	1884		
Oklahoma City	1,239	22	28.80	30.17	+ .02	25.6	- 5.4	59	5	34	-10	26	15	31	1.71	- 0.2	12	5,398	n.	36	n.	7	10	10	11	6.0	40.0	1889	21.0	1884		
Southern Slope.																																
Abilene	1,748	8	28.27	30.16	+ .02	43.0	- 3																									

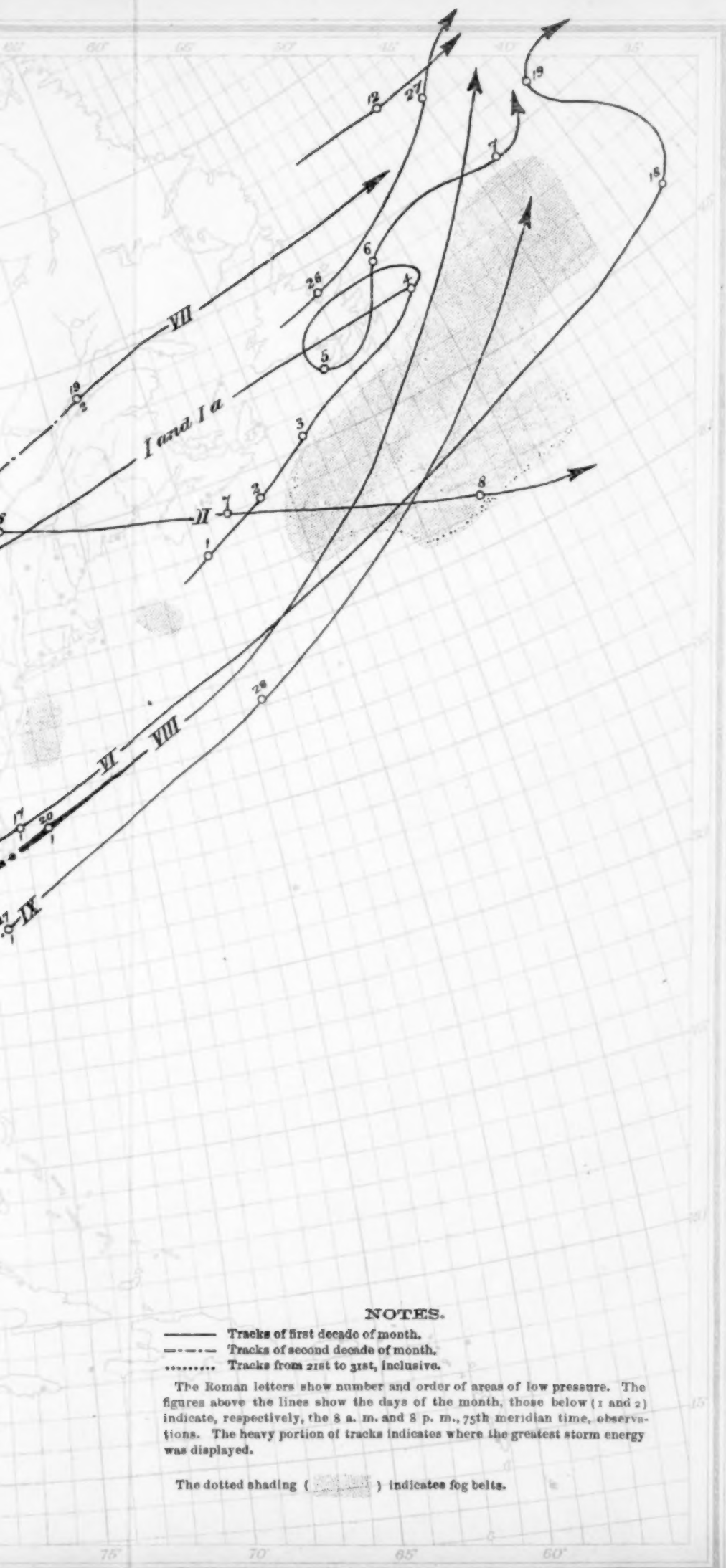
STATIONS OF THE WEATHER BUREAU

Station.	Observer.	Station.	Observer.	Station.	Observer.
<i>First Order.*</i>					
Ablene, Tex.	Allen Buell.	Lexington, Ky.	V. E. Muncy.	Columbia, Tex.	J. S. Rogers.
Albany, N. Y.	A. F. Sims.	Little Rock, Ark.	F. H. Clarke.	Coriscana, Tex.	E. L. Gibson.
Alpena, Mich.	H. McP. Baldwin.	Los Angeles, Cal.	G. E. Franklin.	Cuero, Tex.	Dr. J. M. Reuss.
Atlanta, Ga.	Park Morrill.	Louisville, Ky.	Frank Burke.	Dallas, Tex.	H. P. Berry.
Augusta, Ga.	David Fisher.	Manchester, N. H.	J. H. Melton.	Hearne, Tex.	W. A. Snell.
Bismarck, N. Dak.	Wm. H. Fallon.	Meridian, Miss.	Geo. Hass Hagen.	Houston, Tex.	D. R. Saunders.
Boston, Mass.	J. W. Smith.	Miles City, Mont.	E. L. Douglas.	Huntsville, Tex.	W. Y. Barr.
Buffalo, N. Y.	E. A. Beala.	Mobile, Ala.	Jas. A. Barry.	Luling, Tex.	J. E. Fisher.
Chicago, Ill.	S. S. Bassler.	Montgomery, Ala.	Arthur E. Hackett.	Longview, Tex.	G. W. Krech.
Cincinnati, Ohio.	W. S. Currier.	Montrose, Colo.	P. J. Bolton.	Orange, Tex.	J. H. Kelly.
Cleveland, Ohio.	U. G. Myers.	New Haven, Conn.	H. J. Cox.	Tyler, Tex.	W. A. Hartel.
Colorado Springs, Colo.	C. M. Strong.	New London, Conn.	R. O. Lazenby.	Waco, Tex.	W. H. Godber.
Columbus, Ohio.	F. J. Walls.	Northfield, Vt.	Wm. Line.	Weatherford, Tex.	B. H. Ledbetter.
Davenport, Iowa.	J. J. Gilligan.	North Platte, Nebr.	J. C. Piercy.	Little Rock, Ark. (center).	
Denver, Colo.	Dr. Geo. M. Chappel.	Oklahoma, Okla. T.	Jas. I. Widmeyer.	Brinkley, Ark.	A. J. Hahn.
Des Moines, Iowa.	E. A. Evans.	Oswego, N. Y.	J. G. Linsley.	Forrest, Ark.	J. H. Bard.
Detroit, Mich.	Geo. T. Todd.	Palestine, Tex.	J. M. Sherier.	Helena, Ark.	A. J. Gaschen.
Dodge City, Kansas.	B. H. Bronson.	Parkersburg, W. Va.	W. W. Dent.	Malvern, Ark.	Jos. Coffey.
Duluth, Minn.	D. C. Murphy.	Pensacola, Fla.	E. C. Easton.	Newport, Ark.	R. C. McMann.
Eastport, Me.	N. D. Lane.	Pierre, S. Dak.	W. A. Shaw.	Paris, Tex.	C. E. Thorne.
El Paso, Tex.	Marsden Wright.	Point Barrow, Alaska.	L. M. Stevenson.	Pine Bluff, Ark.	J. E. O'Connor.
Galveston, Tex.	Chas. W. Ling.	Port Angeles, Wash.	Wm. Bell.	Prescott, Ark.	Wm. Friganza.
Havre, Mont.	E. J. Glass.	Port Huron, Mich.	Wm. M. Edmondson.	Russellville, Ark.	O. M. Elsworth.
Helena, Mont.	S. W. Glenn.	Pueblo, Colo.	E. P. Jones.	Texarkana, Ark.	M. J. Nash.
Huron, S. Dak.	C. F. R. Wappenhans.	Raleigh, N. C.	F. H. Brandenburg.	Memphis, Tenn. (center).	
Indianapolis, Ind.	E. R. Demain.	Rapid City, S. Dak.	C. F. von Herrmann.	Arlington, Tenn.	A. T. B. Etheridge.
Jacksonville, Fla.	P. Connor.	Red Bluff, Cal.	Wm. Norrington.	Batesville, Miss.	J. M. Cox.
Kansas City, Mo.	H. E. Wilkinson.	Red Wing, Minn.	John J. McLean.	Bolivar, Tenn.	W. F. McCarty.
Keeler, Cal.	H. B. Boyer.	Sacramento, Cal.	P. T. Williams.	Brownsville, Tenn.	W. A. Roberts.
Key West, Fla.	Henry Pennywitt.	Saint Vincent, Minn.	J. A. Barwick.	Corinth, Miss.	O. O. Henson.
Knoxville, Tenn.	S. L. Ryker.	San Antonio, Tex.	H. W. Grasse.	Covington, Tenn.	W. N. White.
Lynchburg, Va.	S. L. Dasher.	Sandusky, Ohio.	L. F. Passaliguie.	Decatur, Ala.	J. M. Vickray.
Manistee, Mich.	P. McDonough.	Shreveport, La.	H. F. Hough.	Dyersburg, Tenn.	H. G. Wood.
Marquette, Mich.	W. M. Wilson.	Sioux City, Iowa.	C. A. Smith.	Hernando, Miss.	L. B. Jones.
Memphis, Tenn.	C. E. Linney.	Southport, N. C.	U. G. Pursell.	Holly Springs, Miss.	N. T. Bryant.
Milwaukee, Wis.	S. G. Duffey.	Springfield, Ill.	Louis Dorman.	Milan, Tenn.	O. F. Cantwell.
Moorhead, Minn.	S. A. Blundon.	Springfield, Mo.	John Craig.	Tusculum, Ala.	John Lasseter.
Nantucket, Mass.	J. B. Marbury.	Stanton, Fort, N. Mex.	T. S. Collins.	Mobile, Ala. (center).	
Nashville, Tenn.	R. E. Kerkam.	Tatoosh Island, Wash.	Mrs. M. H. Bailey.	Aberdeen, Miss.	O. L. McKay.
New Orleans, La.	E. B. Dunn.	Titusville, Fla.	Frank R. Beahan.	Columbus, Miss.	W. B. Hopkins.
New York City.	A. B. Crane.	Tucson, Ariz.	Jos. E. Lanouette.	Evergreen, Ala.	Mattie Loe.
Norfolk, Va.	H. F. Alciatore.	Valentine, Nebr.	Julius C. Hayden.	Livingston, Ala.	L. J. Marbury.
Olympia, Wash.	Geo. E. Hunt.	Walla Walla, Wash.	John Fitzgerald.	Macon, Miss.	B. J. Allen.
Omaha, Nebr.	L. M. Dey.	Wichita, Kans.	Fitzgugh Newman.	Okolona, Miss.	S. J. Russell.
Philadelphia, Pa.	U. G. Myers.	Winnemucca, Nev.	Dr. Fred. L. Johnson.	Thomasville, Ala.	J. N. Cammack.
Pikes Peak, Colo.	O. D. Stewart.	Woods Holl, Mass.	Geo. D. Boucher.	Waynesboro, Miss.	W. R. McKinley.
Pittsburg, Pa.	B. S. Pague.	Yankton, S. Dak.	J. P. Slaughter.	Montgomery, Ala. (center).	
Portland, Oregon.	A. L. White.		Geo. W. Scott.	Enfauila, Ala.	O. T. Moore.
Rochester, N. Y.	Thos. Gibson.	<i>Third Order.†</i>		Fort Deposit, Ala.	W. L. Van Pelt.
Roseburg, Oregon.	W. H. Hammon.	Astoria, Oregon.	John Grover.	Marion, Ala.	Ira J. Van.
Saint Louis, Mo.	P. F. Lyons.	Auburn, Ala.	Prof. P. H. Mell.	Opelika, Ala.	W. L. Carmack.
Saint Paul, Minn.	Geo. N. Salisbury.	Cape Henry, Va.	J. P. Sherry.	Pine Apple, Ala.	J. B. Rauh.
Salt Lake City, Utah.	M. L. Hearne.	Columbia, Mo.	H. A. McNally.	Union Springs, Ala.	T. P. Wade.
San Diego, Cal.	P. T. Jenkins.	Columbia, S. C.	A. P. Butler.	New Orleans, La. (center).	
San Francisco, Cal.	H. B. Hersey.	Crete, Nebr.	G. A. Loveland.	Alexandria City, La.	L. C. Giffe.
Santa Fe, N. Mex.	C. L. Bossell.	Currituck Inlet, N. C.	John D. Biagden.	Amite, La.	Florence Hills.
Sault Ste. Marie, Mich.	P. H. Smyth.	East Clallam, Wash.	R. S. Dummick.	Brookhaven, Miss.	E. M. Bee.
Savannah, Ga.	Chas. Stewart.	Escanaba, Mich.	J. C. Morrell.	Cheyneville, La.	W. W. Wall.
Spokane, Wash.	Thomas J. Considine.	Ithaca, N. Y.	R. M. Hardinge.	Coushatta, La.	L. M. Howard.
Tampa, Fla.	E. A. Hanner.	Mico, Fla.	Hal. P. Hardin.	Hazlehurst, Miss.	B. Fugate.
Toledo, Ohio.	Wm. E. Butler.	Minneapolis, Minn.	John H. Harmon.	Lafayette, La.	J. J. Davidson.
Vicksburg, Miss.	S. W. Beall.	Narragansett Pier, R. I.	Mrs. M. E. Conway.	Minden, La.	W. S. Hunter.
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Wilmington, N. C.	A. Ashenberger.	New Brunswick, N. J.	E. W. McGann.	Natchitoches, La.	Sam Levy.
Yuma, Ariz.		Point Reyes Light, Cal.	T. R. Ryan.	Port Gibson, Miss.	H. H. Crisler.
		Port Crescent, Wash.	Otto B. Hart.	Savannah, Ga. (center).	
		Pyshyt, Wash.	J. P. Fallihue.	Albany, Ga.	J. S. Clark.
		Topeka, Kans.	T. B. Jennings.	Alapaha, Ga.	C. I. Jones.
		University, Miss.	Prof. R. B. Fulton.	Americus, Ga.	L. A. Smith.
		Vineyard Haven, Mass.	W. W. Neiffert.	Bainbridge, Ga.	J. E. Peacock.
				Cordele, Ga.	W. D. Webster.
		<i>Special Cotton Region Stations.‡</i>		Eastman, Ga.	C. H. Peacock.
		Atlanta, Ga. (center).		Fort Gaines, Ga.	S. E. Lewis.
		Columbus, Ga.	J. W. Long.	Gainesville, Fla.	James Bell.
		Gainesville, Ga.	R. T. Murphy.	Millen, Ga.	J. R. Sheppard.
		Greenville, S. C.	Mrs. S. A. Crittenden.	Quitman, Ga.	A. W. Thomas.
		Griffin, Ga.	P. H. McDowell.	Thomasville, Ga.	Robt. Thomas, Jr.
		Macon, Ga.	W. M. Craven.	Way Cross, Ga.	W. P. Whelphy.
		Newnan, Ga.	Nora M. Avery.	Vicksburg, Miss. (center).	
		Spartanburg, S. C.	F. P. Robinson.	Jackson, Miss.	H. S. Wright.
		Toccoa, Ga.	J. K. Dixon.	Lake, Miss.	Willie Wilkins.
		West Point, Ga.	J. A. Erwin.	Monroe, La.	W. W. Renwick.
		Augusta, S. C. (center).		Rolling Fork, Miss.	S. W. Langford.
		Allendale, S. C.	C. B. Farmer.	Wilmington, N. C. (center).	
		Athens, Ga.	W. P. Briggs.	Cheraw, S. C.	W. R. Go-frey.
		Batesburg, S. C.	D. P. Hartley.	Florence, S. C.	P. H. Walsh.
		Blackville, S. C.	S. S. Turner.	Goldaboro, N. C.	Nettie Thomas.
		Camak, Ga.	J. A. Chapman.	Greenaboro, N. C.	G. W. Pritchett.
		Greenwood, S. C.	W. D. Vance.	Lumberton, N. C.	B. M. Boyd.
		Union Point, Ga.	R. F. Bryan.	Newbern, N. C.	W. G. Davis.
		Washington, Ga.	Luey V. Kemp.	Weldon, N. C.	T. A. Clarke.
		Waynesboro, Ga.	H. W. Blount.	<i>Sugar and Rice Stations.‡</i>	
		Charleston, S. C. (center).		New Orleans, La. (center).	
		Green Pond, S. C.	E. G. Strobel.	Baton Rouge, La.	H. A. Morgan.
		Hardeeville, S. C.	W. J. Evans.	Covington, La.	W. B. Franklin.
		Kingstree, S. C.	T. P. Willis.	Donaldsonville, La.	W. D. Park.
		St. Georges, S. C.	W. G. Senn.	Franklin, La.	E. M. Cornay.
		St. Matthews, S. C.	J. S. Wansmaker.	Lake Charles, La.	Wm. Meyer.
		Galveston, Tex. (center).		Opelousas, La.	E. J. Clements.
		Belton, Tex.	A. J. Embree.	Rayne, La.	I. A. Smith.
		Brenham, Tex.	J. G. Sloan.	Schriever, La.	John T. Moore.

* Take two observations daily, and also record continuously important meteorological phenomena, such as wind-direction and velocity, precipitation, temperature, barometric pressure, etc., by means of self-registering instruments. † Take two observations daily. ‡ Take one observation, in addition to other special duties. § Take one observation daily from April 15 to November 30 each year, and telegraph it to district centers (regular Weather Bureau stations).







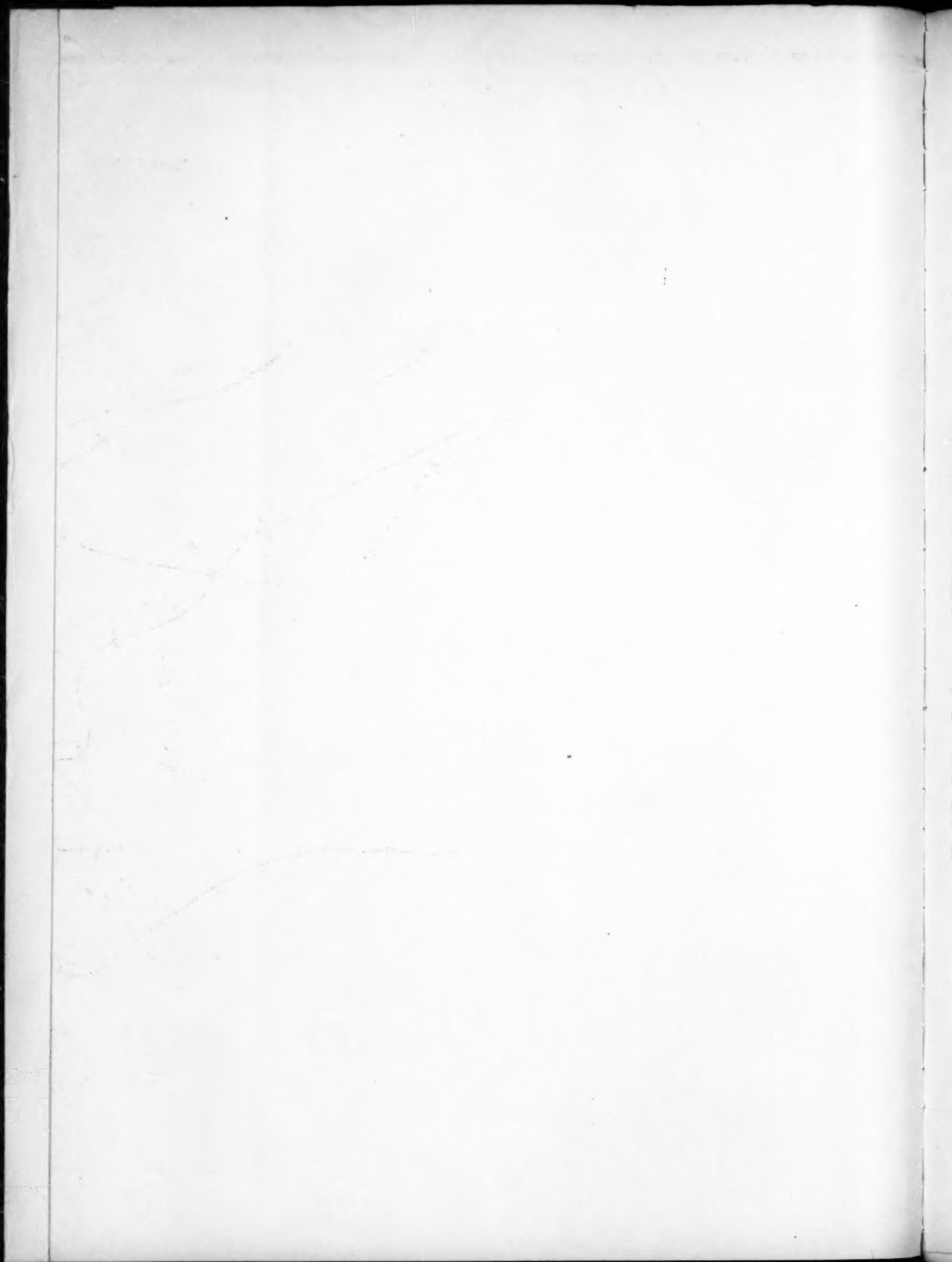
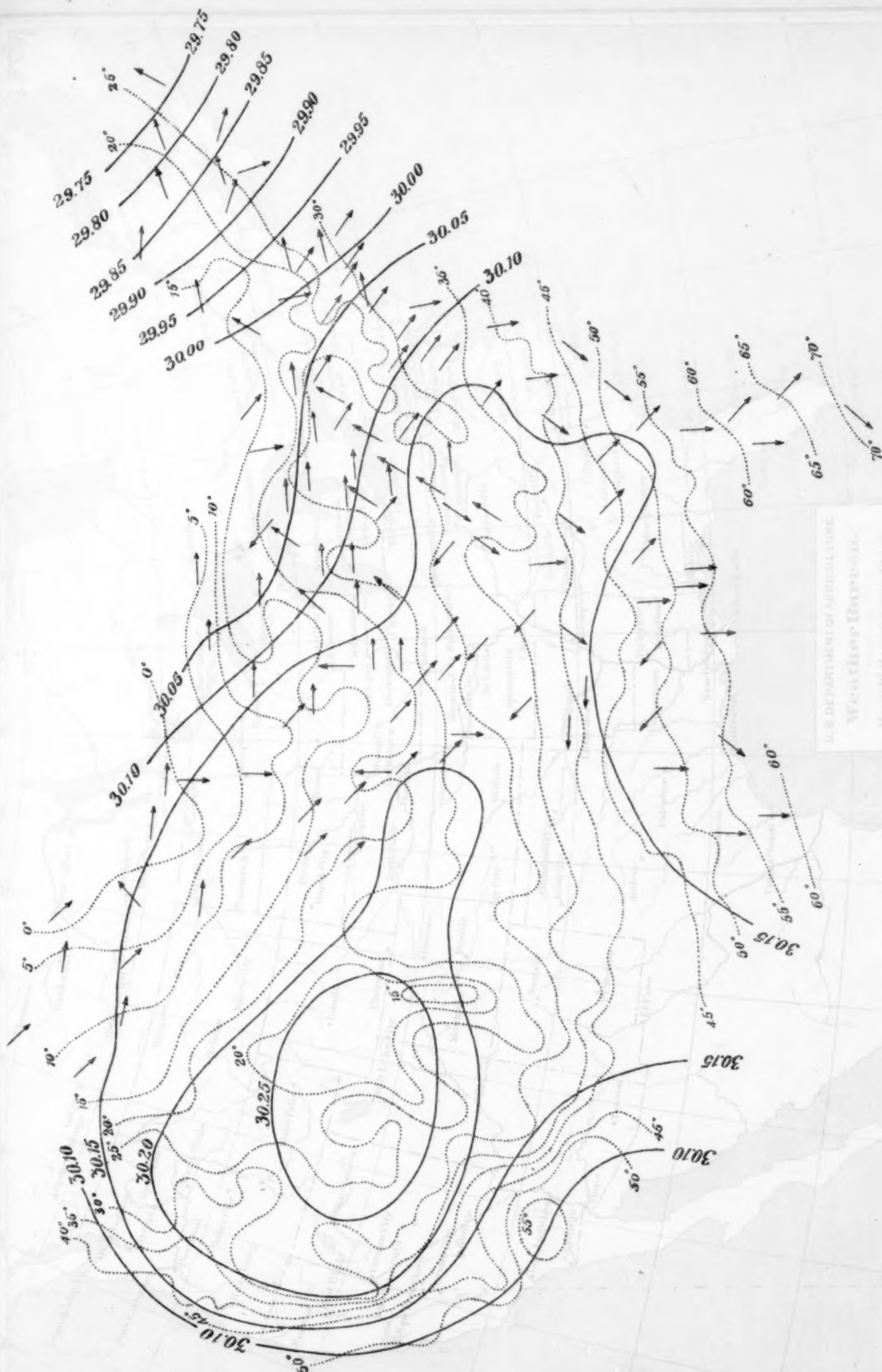


Chart II. Isobars, Isotherms, and Winds. December, 1892.



U. S. DEPARTMENT OF AGRICULTURE
 Weather Bureau.
 Published by authority of the Secretary of
 Agriculture.
 Prepared under the direction of the
 Chief of the Weather Bureau.
 December 1892.

22. A sketch of the road to the top of the mountain.



Chart III. Precipitation. December, 1892.

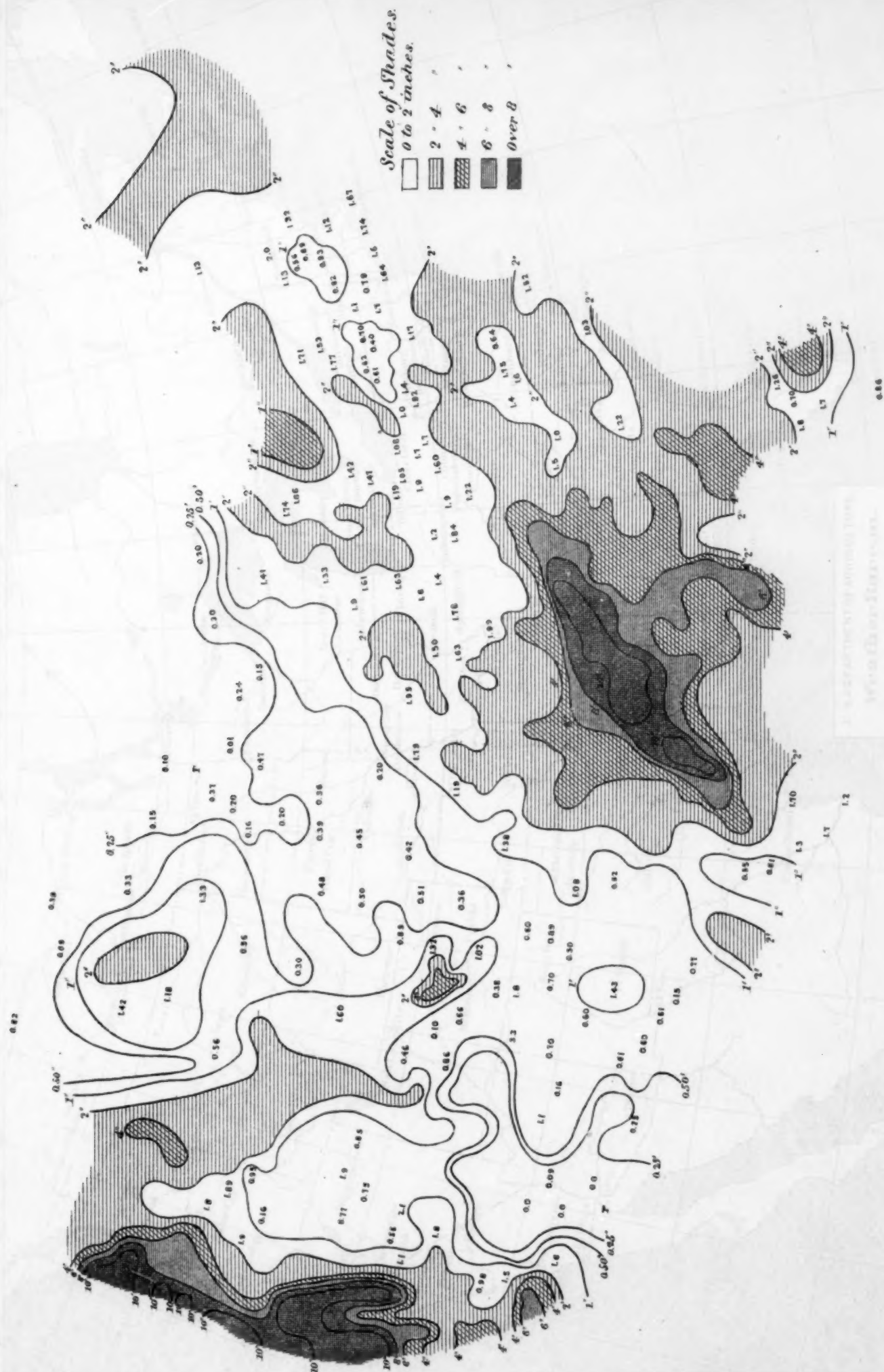


Chart IV. Tracks of areas of High Pressure. December, 1892.

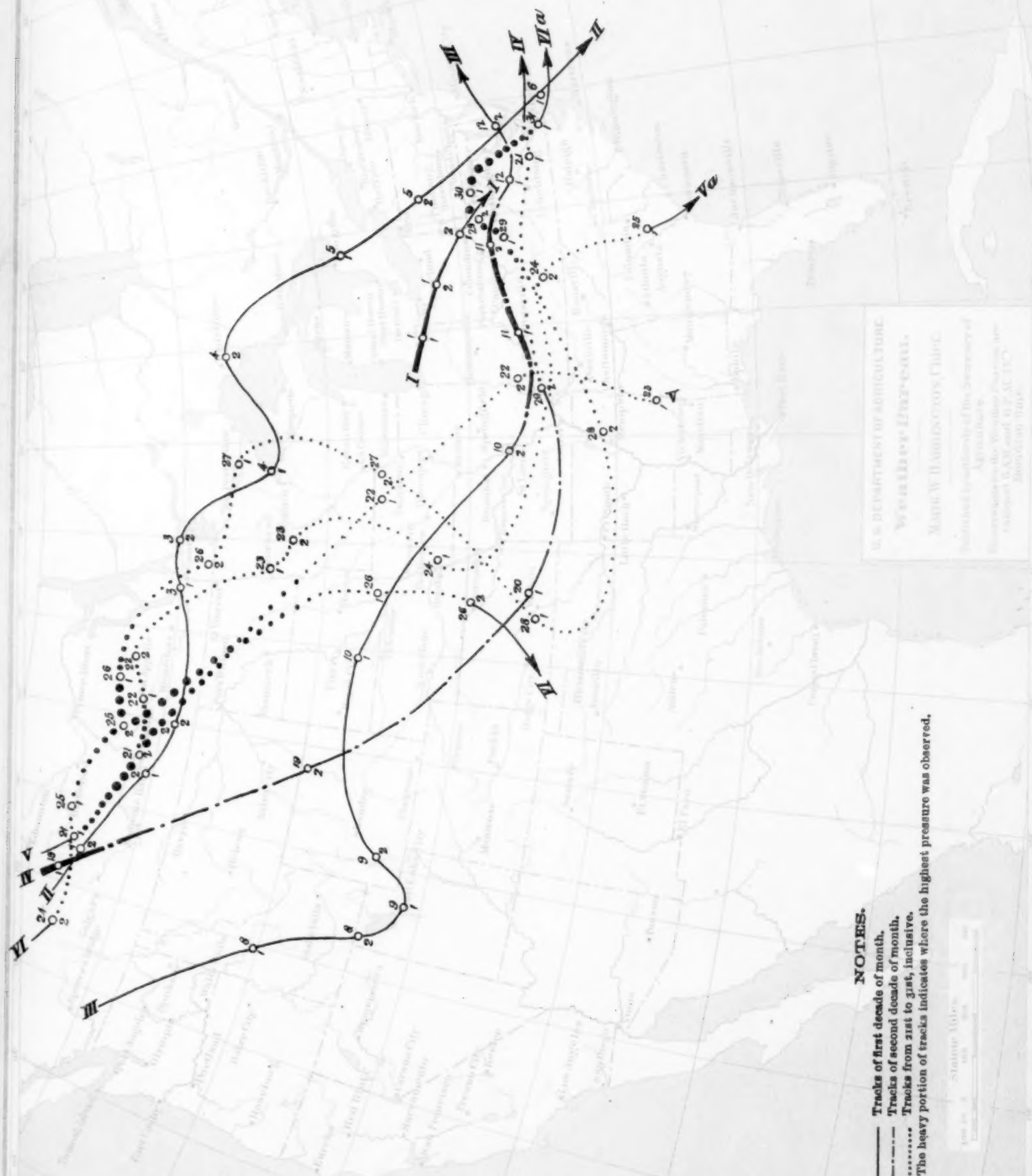


Chart V. Depth of Snowfall (inches) and Limits of Freezing Weather, December, 1892.





Chart VI. Depth of Snow (inches) reported on ground December 15, 1892.

Chart VI. Depth of Snow (inches) reported on ground December 15, 1892.





Chart VII. Depth of Snow (inches) reported on ground December 31, 1892.





List of voluntary observers of the Weather Bureau, who furnish meteorological reports for the Monthly Weather Review.

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John M Ackley Alco Ala	X	Richard H Farley (Farley's Camp) Tip Top Ariz	A P Robinson Conway Ark	W W Bliss Duarte Cal	W H Edwards (Orangevale) Folsom City Cal
Prof P H Mell Auburn Ala		C M Funston Flagstaff Ariz	Jacob Brobst Corning Ark	E S Barney Drytown Cal	G W Smith Palermo Cal
Wm Fowler Bermuda Ala		A T Colton Florence Ariz	D H Hopkins Dallas Ark	A C Hillman Davisville Cal	H S Channing Pasadena Cal
W J Holland Brewton Ala		Post Surgeon Fort Apache Ariz	Dr W B Johnson El Dorado Ark	J A Edman (Edmanton) Meadow Valley Cal	G W Barlow Placerville Cal
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Cortez Cox (Ariz Canal Co's dam) Phoenix Ariz		C P Smith Wilgus Ariz	W A Webster Bakersfield Cal	H P Aldrich Needles Cal	Austin Young (Tehachapi) Greenwich Cal
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D D Ross (Chiracahua Mt) Tombstone Ariz		J E Scanlan Bee Branch Ark	Wm Barry (Centreville) Niles Cal	C H Kellogg Newcastle Cal	Dr Geo McCowan Ukiah Cal
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			J G Heald Cloverdale Cal	Director Chabot Obs'y Oakland Cal	

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P W Warnick Amherst Colo	E P Moon Husted Colo	G F Breninger Table Rock Colo	A F Wyman Archer Fla	Wm W Kimzey (Diamond) Roy Ga
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Earl Whedon Del Norte Colo	W M Stewart Minneapolis Colo	Charles W Hubbard Middletown Conn	Miss M M Gardner Myers Fla	C M Witcher Point Peter Ga
W O Stephens Delta Colo	C S Aldrich Monte Vista Colo	R R Smith New Hartford Conn	Christopher Westall New Smyrna Fla	J F Wilson Poulan Ga
J J Gilligan Denver Colo	A E Sprague Moraine Colo	Rev Wm Goodwin New Hartford Conn	W L Jewett Ocala Fla	W M Towers Rome Ga
S J Pratt Dillon Colo	Miss Emma Putnam Orchard Colo	C H Lathrop North Franklin Conn	Dr Geo E Walton Orange City Fla	C E Lee Statesboro Ga
S W De Busk Downing Colo	J M Wadsworth Pagoda Colo	C H Truesdale North Grosvenor Dale Conn	M O Dovel Orlando Fla	Idaho.
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Costilla N Mex	H W Goodrich Red Cliff Colo	Storrs School Exp Sta Storrs Conn	Post Surgeon (St Francis Barracks) St Augustine Fla	Boise City Idaho
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S J Birdsall Fort Collins Colo				

D McLoughlin
Kootenai Idaho
J Sherwood
(Henry's Lake)
Lake Idaho
J W Cowden
Martin Idaho
Dr F B Delano
Payette Idaho
Ferdinand Alers
Ruthburg Idaho

Illinois.

J W C Gray
Atwood Ill
Dr M M Robbins
Aurora Ill
W Holden
Aurora Ill
Prof M J Elrod
Bloomington Ill
Dan E Zook
Bushnell Ill
W P Halliday
(Pres't City Nat'l Bank)
Cairo Ill
Public Library
Cairo Ill
R O Purviance
Carlinville Ill
Dr J L R Wadsworth
Collinsville Ill
G W Bright
Decatur Ill
Prof A O Clark
Dixon Ill
C L Farrington
East Peoria Ill
E B Schooley
Effingham Ill
C A Shinkle
Ellsworth Ill
J M Stine
Fairmount Ill
Post Surgeon
Fort Sheridan Ill
Fred U White
Galva Ill
T J Trovillion
Golconda Ill
Prof M S Oudyn
Greenville Ill
Shirley E Gray
Griggsville Ill
J M Ruggles
Havana Ill
A T Purviance
Hennepin Ill
Wm Rogan
(Irishtown) Carlyle Ill
W J S Cathcart
(Jordans Grove) Sparta Ill
Geo McVicker
Kankakee Ill
Frank E Sanford
La Grange Ill
B A Jenkins
Louisville Ill
J B Sheapley
Martinsville Ill
Dr G Leibrock
Mascoutah Ill
J Withington
Mattoon Ill
W P Gibbs
McLeansborough Ill
E E Thornton
Muddy Valley Ill
C W Adams
New Haven Ill
C H Fahs
Olney Ill
V E Phillips
Olney Ill
Dr W H Chappelle
Oregon Ill

J S Seeley
Oswego Ill
Dr J O Harris
Ottawa Ill
J E Templeton (Palestine)
Rich Woods Ill
J K Eberle
Pana Ill
Dr F Brendel
Peoria Ill
H A Burr
Philo Ill
J W James (Riley)
Marengo Ill
Henry B Clark
Rantoul Ill
T D Robertson
Rockford Ill
N T Veatch
Rushville Ill
Godfrey Knetzger
Saint John Ill
John Craig
Springfield Ill
R Dow
Sycamore Ill
O C Nussle
Walnut Ill
O A Watson
Watseka Ill
P J Bates
White Hall Ill
F Osborne
Winnebago Ill

Indiana.

L Stealy
Angola Ind
J T Moss
Ashboro Ind
C F Hole
Butler Ind
Rev E J Spelman
Cambridge City Ind
Dr N I Kithcart
Columbia City Ind
J A Perry
Columbus Ind
H Hessler
Connersville Ind
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J P White
De Gonia Springs Ind
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Franklin Ind
C W Whitney
Hammond Ind
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J C Loomis
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D E Pryor
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E Kirkwood
Mauzy Ind
J C Black
Michigan City Ind
J M Lockwood
Mount Vernon Ind
Stevens & Durham
Muncie Ind

Jonathan Beard
New Albany Ind
J F Hood
Point Isabel Ind
E Jones
Princeton Ind
Dr W N Wirt
Rockville Ind
J A Forsythe
Seymour Ind
James R Hart
Union City Ind
Prof C G Boerner
Vevay Ind
Dr W B Squire
Worthington Ind

Indian Territory.

Post Surgeon
Fort Supply Ind T
C A King
Gwendale Ind T
C H Heald
Healdton Ind T
B S Thompson
Lehigh Ind T
Ignatus Spitzer
Purcell Ind T
Wm Noble
South McAlester Ind T

Iowa.

James Barr
Algona Iowa
David E Hadden
Alta Iowa
Conrad Schadt
Amana Iowa
Iowa Agricultural College
Ames Iowa
E W Eaton
Ames Iowa
Isaac Young
Ames Iowa
J W Love
Atlantic Iowa
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James Rodgers
Blakeville Iowa
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Grundy Centre Iowa
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Hampton Iowa
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Hawkeye Iowa
M T Ashley
Hopeville Iowa
Theodore Marks
Hopkinton Iowa
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Independence Iowa
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Iowa Falls Iowa
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Logan Iowa
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Maquoketa Iowa
L S Kilborn
Marshalltown Iowa
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Storm Lake Iowa
J M Rider
Tipton Iowa
T F McCune
Vinton Iowa
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C M Trumbauer
Webster City Iowa
Merton L Fuller
Williams Iowa
Will McKnight
Winterset Iowa

Kansas.

W P Gulick
Abilene Kans
Wm Cheetham
Altoona Kans
C H Rhodes
Arkalon Kans
Prof E B Knerr
Atchison Kans
A J Deihl
Belleville Kans
C S Culver
Bucklin Kans
L C Wilson
Buffalo Park Kans
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Burr Oak Kans
A G Alrich
Cawker City Kans
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Colby Kans
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Coldwater Kans
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Columbus Kans
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El Dorado Kans
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Elk Falls Kans
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Englewood Kans
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C Bishir
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Dr E R Heath
1115 Garfield Ave
Kansas City Kans
Jacob Nixon
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Kiowa Kans

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v

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L D Watkins (Fairview) Manchester Mich				E H Adams Lamar Mo
				W D Wade Lamonte Mo

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M W Serl Lebanon Mo	R H Mansfield Wellsville Mo	E B Taylor David City Nebr	D F Trunkay Red Cloud Nebr	State University Reno Nev
Chas Tenbuer Lexington Mo	J A Truex West Plain Mo	Chas Seltz De Soto Nebr	J A Chadbourne Santee Agency Nebr	L Allen St Clair Nev
J R Eaton Liberty Mo	W H Liggett Wheatland Mo	H H Calkins Dunning Nebr	L E Ost Seward Nebr	Mrs Walter Stofiel Stofiel Nev
J W James Mansfield Mo	L A Dewey Whiteside Mo	A Dahl Ericson Nebr	G H Rogers Springview Nebr	Wm Harton Sunnyside Nev
E R Graham Marble Hill Mo	Montana.	J A Wood Ewing Nebr	Mark Baldwin Stanton Nebr	James B Gilmore Tybo Nev
Rev W H Black Marshall Mo	Will Kennedy Boulder Valley Mont	Dr I Humphrey Fairbury Nebr	C A Skinner (State Farm) Lincoln Nebr	Prof Mark Averill Virginia City Nev
Marcus W Wood McCunes Station Mo	Mrs M W Alderson Bozeman Mont	P B Gailord Fairfield Nebr	Henry Giger Steinauer Nebr	C H Gordon Wabaska Nev
Dr. J F Llewellyn Mexico Mo	Geo T Wicks Cokedale Mont	P Daniels Falls City Nebr	F L Naylor Superior Nebr	New Hampshire.
J D Sanders Mine La Motte Mo	C V Walker (Dearborn Canyon) Hogan Mont	Post Surgeon Fort Robinson Nebr	P W Kissar Syracuse Nebr	F W Palmer Antrim N H
J M Hasness Mound City Mo	College of Montana Deer Lodge City Mont	Post Surgeon (Fort Sidney) Sidney Nebr	G D Carrington Table Rock Nebr	O F Cole Berlin N H
E S Allen Mount Vernon Mo	S L Pratt Elk Park Mont	J N Bennett Franklin Nebr	Dr A D Nesbit Tekamah Nebr	Dr Q A Bridges Berlin Mills N H
A H Helmbrecht New Boston Mo	Post Surgeon Fort Custer Mont	Isaac E Heaton Fremont Nebr	W N Hunter Turlington Nebr	Benj Tucker Bethlehem N H
Andreas Olmhausen New Hartford Mo	Post Surgeon Fort Keogh Mont	F M Flory Geneva Nebr	W Bardon Wallace Nebr	G W Bridges Brookline N H
Max Eimbeck New Haven Mo	Wm Gaddis Fort Logan Mont	G S Truman Genoa Nebr	G Treat Weeping Water Nebr	Hon W L Foster Concord N H
A I Zeigel New Palestine Mo	Post Surgeon Fort Missoula Mont	John P Finley Gering Nebr	E G Bruner West Point Nebr	H C Allison Dublin N H
G E Nichols Neosho Mo	Post Surgeon (Camp Poplar River) Poplar Mont	J M Callender Haigler Nebr	John L Crossley Whitman Nebr	Agr Exp Sta Durham N H
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H Montgomery Olden Mo	E J Glass Helena Mont	O F Heartwell Hastings Nebr	W H Davis York Nebr	John M Wilson Groveton N H
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W Lake
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Paterson N J
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W T Wilson
Penns Grove N J
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Plainfield N J
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Pochunk Mt
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Embudo N Mex
E A Clemens
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Magdalena N Mex
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E B Bartlett
(Palermo)
Vermillion N Y
Post Surgeon
Plattsburgh Barracks N Y
Prof John M Dolph
Port Jervis N Y
W H Jeffers
(near Perry City)
Trumansburgh N Y
G W F Smith
Potsdam N Y
Vassar College Obs'y
Poughkeepsie N Y
Wm Weaver
Quaker Street N Y
Dr H C Sutton
Rome N Y
J H Coryell
Romulus N Y
Post Surgeon
Madison Barracks
Sackets Harbor N Y
Selah B Strong
Setauket N Y
James E Wilson
South Canisteo N Y
D C Sharpe
South Kortright N Y
R T Church
Turin N Y
Thomas Birt
Utica N Y
George A Fairbank
Watertown N Y
Dr James K King
Watkins N Y
O F Corwin
Wedgwood N Y
Post Surgeon
Military Academy
West Point N Y
Post Surgeon
Willetts Point
Whitestone N Y
Prof O R Willis
White Plains N Y
Post Surgeon
Fort Niagara
Youngstown N Y
North Carolina.
Dr Karl von Ruck
Asheville N C
C N Allen
Auburn N C
J H Greene
Bakersville N C
Miss Maggie Cook
Boone N C
Prof J W Gore
Chapel Hill N C
D E Stearns
Columbus N C
T B Lindsay
Douglas N C
Miss Albertine Staub
Highlands N C
Barry C Hawkins
Horse Cove N C
Mrs R L Beall
Lenoir N C
Prof L W Bagley
Littleton N C
Prof S D Bagley
Louisburg N C
J A Sinclair
Marion N C
Geo I White
Morganton N C

Prof H T J Ludwig
Mt Pleasant N C
J W Ashby
Mt Airy N C
Prof Geo S Wills
Oak Ridge N C
Prof A H Merritt
Pittsborough N C
Dr Herbert B Battle X
Raleigh N C
C F von Hermann X
Raleigh N C
Dr J M Stansil
Rockingham N C
Dr James A Wise
Roxborough N C
J A Hedrick
Salisbury N C
Robt P McAnally
Saxon N C
R J Noble
Smithfield N C
H L Kimrey
Soapstone Mount N C
Paul Clark
Southern Pines N C
E V Zoeller
Tarboro N C
Dr J M Gallagher
Washington N C
T A Clark
Weldon N C
H Clay Williams
Willeton N C
North Dakota.
Geo H Fay
Ashley N Dak
W H Fallon X
Bismarck N Dak
T S Lowrie
Bottineau N Dak
H B Walton
Carrington N Dak
H D Orvis
Churchs Ferry N Dak
Rev Jno Orchard
Dickinson N Dak
Chas Ackley
Ellendale N Dak
Prof E F Ladd
Fargo N Dak
Dr W W Bradley
Forman N Dak
E B Gose
Fort Stevenson N Dak
Post Surgeon
Fort Yates N Dak
S J Pound
Gallatin N Dak
H H Mott
Grafton N Dak
University North Dakota
Grand Forks N Dak
N S French
Grand Rapids N Dak
J W Irvine
Lidgerwood N Dak
J W Foley Sr
Medora N Dak
A C O Lomen
Milton N Dak
S S Marsh
Minto N Dak
Julius H Hoof
Napoleon N Dak
M V Hostetter
Reynolds N Dak
John Cryderman
St Johns N Dak
C A McKean
Wahpeton N Dak
G F McDonald
White Earth N Dak
Peter Ross
Wild Rice N Dak

Peter M Cudhie Willow City N Dak	S M Luther Garrettsville Ohio	J B Gish Rittman Ohio	E S Penfield Canyon City Oregon	Prof J G Cope Bloomsburgh Pa
C L Thomson Woodbridge N Dak	Dr T W Gordon Georgetown Ohio	T G Briggs Sharon Center Ohio	State Agr'l College Corvallis Oregon	A H Boyle Blue Knob Pa
Miss Sophia C Long Yule N Dak	Dr A D Cole Granville Ohio	T B Arnett Shenandoah Ohio	Miss E Bicknell Corvallis Oregon	David H Harvey (Browers Lock) Oaks Pa
Ohio.	W B Longstreth Gratit Ohio	A H Hoge Sheperdstown Ohio	W B Emmons Crook Oregon	J E Pague Carlisle Pa
Prof H V Egbert Akron Ohio	Dones Bros Greenfield Ohio	George Olinger Springborough Ohio	Dr G Wigg (East Portland) Portland Oregon	W T Gordon Coatesville Pa
James W Barnes Annapolis Ohio	J E Bentley Green Hill Ohio	B B Heaslitt Strongsville Ohio	Thos Pearce X Eola Oregon	Dr M H Boye Coopersburgh Pa
Dr P H Clark Ashland Ohio	C G Katzenberger Greenville Ohio	D D Thomas Thurman Ohio	Prof S E McClure State University Eugene Oregon	Wm Loveland Corry Pa
Prof Eli Dunkle Athens Ohio	J B Conn Hackney Ohio	Prof T H Sonnedecker Tiffin Ohio	Pacific University Forest Grove Oregon	T H Walton Doylestown Pa
L L Reed Auburn Ohio	James Bull Hanging Rock Ohio	R B Crouch Tyrone Ohio	J S Gray Gardiner Oregon	J R Wagner Drifton Pa
S M Painter Bangorville Ohio	Rev Edward Seymour Harbor Ohio	Dr A Billhardt Upper Sandusky Ohio	Miss Jennie A Keeher (Gleno) via Bay City Oregon	Theo Day Dyberry Pa
Frank E Fitch Bellevue Ohio	H Twohey Hedges Ohio	W M Smith Van Wert Ohio	J B Paddock Grants Pass Oregon	Dr J W Moore Easton Pa
P W Barton Bement Ohio	J W Doncaster Hillhouse Ohio	John Courtright Walnut Ohio	J H Neal (Happy Valley) Diamond Oregon	F C Wintermute East Mauch Chunk Pa
J W Powell Benton Ridge Ohio	J N Hogsett Hillsborough Ohio	Thomas Mikesell Wauseon Ohio	A Smith Heppner Oregon	C F Sweet Edinborough Pa
S Williamson Bethany Ohio	Prof G H Colton Hiram Ohio	D Lorbach Waverly Ohio	Dr P G Barrett Hood River Oregon	T B Lloyd Emporium Pa
G R Aylesworth Big Prairie Ohio	Dr J B Owsley Jacksonboro Ohio	E B Michener Waynesville Ohio	W H Goudy Hubbard Oregon	J C Hilsman (Forks of Neshaminy) Rush Valley Pa
J W Scott Bissells Ohio	L J Demarest Kenton Ohio	Prof J Haywood Westerville Ohio	E Britt Jacksonville Oregon	G W Wood Frederick Pa
P S Wright Bloom Center Ohio	G W Nowels Killbuck Ohio	L S Motte West Milton Ohio	W F White (John Day Junction) Wagner Oregon	E C Wagner Girardville Pa
S R Morris Bloomington Ohio	J D Haderman Leipsic Ohio	Dr F Young Weymouth Ohio	J D McCully Joseph Oregon	N Moore Grampian Pa
S Mehaffy Cambridge Ohio	J C Levering Levering Ohio	Mrs E P Wheeler Wheeler Ohio	A V Beach Lake View Oregon	Wm Shipe Hamburg Pa
J G Oser Campbellstown Ohio	Dr G W Dallison Logan Ohio	Ohio Agri Exp Station Wooster Ohio	J K Romig La Grande Oregon	Dr T B Orchard (Salem Corners) Hamlinton Pa
C Peckenpaugh Camp Dennison Ohio	W S Dean Lordstown Ohio	A Cunningham Wooster Ohio	Saml T Malehorn Langlois Oregon	Prof J A Stewart Holidaysburgh Pa
C F Stokey Canton Ohio	J W Frye Lowell Ohio	A G Frost Youngstown Ohio	L A Miller Lone Rock Oregon	John Torrey Honesdale Pa
R A Beatty Cardington Ohio	Prof T D Biscoe Marietta Ohio	Oklahoma.	Capt W Harris McMinnville Oregon	Prof W J Swigart Huntingdon Pa
J W Helfrich Carrollton Ohio	E H Raffensberger Marion Ohio	C A Cleveland Anadarko Okla	Rev Dr Urban Fisher S J Mount Angel Oregon	Prof S C Schmucker Indiana Pa
J H Brotherton Cedarville Ohio	C H Morris McConnellsville Ohio	A R Henderson Buffalo Okla	Edmund Robinson Newberg Oregon	E C Lorentz Johnstown Pa
Prof W F McDaniel Celina Ohio	S B Eveland McLuney Ohio	Wm Weselhoff Burnett Okla	Dr H J Fuller New Bridge Oregon	G H Kemp Kane Pa
T S Wasson Cherry Fork Ohio	L H Burgess Milfordton Ohio	Post Surgeon Fort Reno Okla	A E Acklern Newport Oregon	B P Kirk Kennett Square Pa
J W Sage (Chicago Junction) Chicago Ohio	G F Copeland Millport Ohio	Post Surgeon Fort Sill Okla	J H Zahner Pendleton Oregon	R J Mickey Kilmer Pa
E T M Williams Clarksville Ohio	Simon Waterston Montpelier Ohio	S C Grasham Gate City Okla	B S Pague X Portland Oregon	Lewis T Lampe Lancaster Pa
G A Hyde 85 Kennard st Cleveland Ohio	W H Harper Mountville Ohio	Morris Collar Guthrie Okla	C T Roberts Salem Oregon	H L Shull Lansdale Pa
J A Sell Coalton Ohio	Jos A Hook New Alexandria Ohio	Perry Rodkey Keokuk Falls Okla	Hon J A Wright Sparta Oregon	G W Hayes Lebanon Pa
L Reeves Colebrook Ohio	C Hall New Berlin Ohio	Henry C Sweet Mangum Okla	S L Brooks The Dalles Oregon	Geo W T Warburton Le Roy Pa
Hon L N Bonham X Columbus Ohio	Dr A M Beers New Comerstown Ohio	James I Widmeyer X Oklahoma City Okla	George Hunt Tillamook Oregon	Prof Wm G Owens Lewisburgh Pa
C M Strong X Columbus Ohio	Wm H Slabuck New Holland Ohio	Mrs Gertrude Sherbourne Ponca Okla	Dr H W Vincent Toledo Oregon	Howard Miller X Lewisburgh Pa
W H Baker Ohio State University Columbus Ohio	H D Govey North Lewisburgh Ohio	Miss Cosette Stratton Sac & Fox Agency Okla	F McDonald Vale Oregon	J T Ambrose Ligonier Pa
Mrs Edith E L Boyer Dayton Ohio	S Edgerton North Royalton Ohio	J M Rice Winnview Okla	G W Dallas Vernonia Oregon	Prof J A Robb Lock Haven Pa
B R Ault Demos Ohio	Prof F F Jewett Oberlin Ohio	Oregon.	Miss Lavina Wagner Wagner Oregon	O V Metzger (Aqueduct) Logania Pa
A C Beardsley Ellsworth Ohio	E U Hyde Orangeville Ohio	John Briggs Albany Oregon	W C Stiles Williams Oregon	Murray Forbes Lycippus Pa
C W Goodspeed Elyria Ohio	J N Ridenour Pataskala Ohio	James W Smith Arlington Oregon	Pennsylvania.	Thos F Sloan McConnellsburgh Pa
Prof A C Redding Findlay Ohio	C T Coates Plattsburg Ohio	F H Carter Ashland Oregon	Dr C B Dudley Altoona Pa	Chas Graves Meadville Pa
Robbins Bros Fostoria Ohio	Dr D N Allard Pomeroy Ohio	Geo Bennett Bandon Oregon	J Grathwohl Blooming Grove Pa	W T Butz New Castle Pa
O A Cory Frankfort Ohio	Dr D B Cotton Portsmouth Ohio	T L Arnold Beulah Oregon		
	A Shinn Ridge Ohio	W C Byrd Burns Oregon		

Dr Geo M Grim
Ottsville Pa
J C Trautwine
3301 Haverford st
W Philadelphia Pa
John E Codman
Bureau of Water
Philadelphia Pa
H L Ball
Philadelphia Pa
John Comly
1529 Centennial Ave
Philadelphia Pa
Franklin Institute
Philadelphia Pa
Knowles Croskey
Phoenixville Pa
R C Stover
Point Pleasant Pa
Dr Chas Moore
Pottstown Pa
J L Heacock
Quakertown Pa
Franklin Yager
Reading Pa
Miss E A G Apple
Saegerstown Pa
J A Roth
Seisholtzville Pa
J M Boyer
Selins Grove Pa
Armstrong & Brownell
Smethport Pa
Geo Lowder
(Smiths Corners)
Point Pleasant Pa
W M Schrock
Somerset Pa
B M Hall
South Eaton Pa
Prof Wm Frear
State College Pa
Prof Susan J Cunningham
Swarthmore Pa
Wm Hunt
Uniontown Pa
H D Deming
Wellsborough Pa
Dr J C Green
West Chester Pa
Harry Alger
Westtown Pa
A W Betterly
Wilkes Barre Pa
Chas Beecher
Wysox Pa
Mrs L H Grenewald
York Pa

Rhode Island.

N G Herreshoff
Bristol R I
N Helme
Kingston R I
Agr Exp Station
Kingston R I
G W Pratt
Lonsdale R I
Thos Dunn
Newport R I
C H Cannon
Onneyville R I
J H Walker
Pawtucket R I
Office City Engineer
Providence R I
Ladd Observatory
Providence R I
D W Hoyt
Providence R I

South Carolina.

Dr C F McGahan
Aiken S C
Benj R Stuart
Columbia S C

J P McNair
Kitchings Mills S C
W G Peterson (Longshore)
Newberry S C
H D Elliott
Port Royal S C
Miss N L Dawson
Simpsonville S C
J J Lucas
Society Hill S C
Dr W W Anderson
Statesburgh S C
E Gillard
Trial S C
J Pagan
Winnsborough S C
J R Schorb
Yorkville S C

South Dakota.

D G Gallette
Aberdeen S Dak
W S Hill
Alexandria S Dak
Thos Aschroft
Ashcroft S Dak
I H Cobb
Bowdle S Dak
E A Cooper
Britton S Dak
Prof Louis McLouth
Brookings S Dak
Lewis P Shew
Carthage S Dak
W F Van Dervoort
Castlewood S Dak
Geo E Masters
De Smet S Dak
Isaac Killian
Elkton S Dak
F J Cross (Cross)
Etta Mine S Dak
A A Humphrey
Faulkton S Dak
G A Perly
Flandreau S Dak
M K Judy
Forestburg S Dak
W F Smith
Forest City S Dak
Post Surgeon
Fort Meade S Dak
Post Surgeon
Fort Sully S Dak
Wm B Tapley
Frankfort S Dak
Dr W H Gates
Gary S Dak
Frank Drew
Highmore S Dak
Geo Melchert
Hotch City S Dak
S W Glenn
Huron S Dak
A S Stuver
Kimball S Dak
M H Dale
Mellette S Dak
D W Diggs
Millbank S Dak
J E Gilbert
Mitchell S Dak
J W Strouse
Oelrichs S Dak
Mrs M F Goddard
Onida S Dak
B W Kumler
Parker S Dak
J S Headley
Parkston S Dak
Jno C Dresson
Piedmont S Dak
G D Young
Plankinton S Dak
James F Cross
Rosebud S Dak

L V Schneider
Salem S Dak
Dr E S Carter
Sioux Falls S Dak
J H Warren
Spearfish S Dak
E G Merriam
Travare S Dak
H Richmond
Tyndall S Dak
Arthur Betts
Webster S Dak
J F Zimmerman
Wentworth S Dak
Harvey M Russ
Wessington Springs S Dak
G W Fink
Wolsey S Dak

Tennessee.

J K R Wallace
Andersonville Tenn
Rev C F Williams
Ashwood Tenn
P B Calhoun
Austin Tenn
Miss Daisy Bell
Bethel Springs Tenn
Miss Mary Smith
Bolivar Tenn
G W Coe
Byrdstown Tenn
G W Martin
(Missionary Ridge)
9 East 8th street
Chattanooga Tenn
Prof J A Lyon
Clarksville Tenn
J I Hall
Covington Tenn
L Boynton
Dunlap Tenn
J C Diemer
Fayetteville Tenn
Chas W Anderson
Florence Station Tenn
Dr John A Campbell
Franklin Tenn
W H Brown
Greeneville Tenn
R Downey
Hohenwald Tenn
W C Hall
Jacksboro Tenn
Hon T C Long
Jackson Tenn
Dr J H Moninger
Johnson City Tenn
Alfred D Foy
Lookout Mountain Tenn
J H Burrow
Lynnville Tenn
Dr J D Plunket
Nashville Tenn
J B Marbury
Nashville Tenn
H C Bate
Nashville Tenn
Dr L W Hooper
Newport Tenn
W C Thompson
Nunnally Tenn
J C Williamson
Parksville Tenn
Ruskin Fergusson
Riddleton Tenn
Dr S M Miller
Rogersville Tenn
Dr W F G Wilson
Rugby Tenn
C L Hefner
Savannah Tenn
B P Fagan
Sharp Tenn
W J Breeding
Spring Dale Tenn

Hardie Johnson
Sweet Water Tenn
Dr C Buchanan
Waynesborough Tenn

Texas.

N L Bartholomew
Albany Tex
S J Overton
Alice Tex
Charles F Mercer
Arlington Tex
Prof H B Wayland
Aurora Tex
Dr Q C Smith
Austin Tex
Ernest Kruger
Austin Tex
Dr J F Weatherhead
Boerne Tex
W H Potter (Bear Creek)
Brady Tex
A T Snody
Big Spring Tex
H Stevens
Brazoria Tex
Prof C S Newhall
Brownwood Tex
W M Spitzer
Burnet Tex
G H Chipman
Childress Tex
T O James
Coldwater Tex
Prof Duncan Adriance
College Station Tex
W A Crowder
Colorado Tex
W H Hamilton
Box 169 Corsicana Tex
G A Eisenlohr
Dallas Tex
J A Whitfield
Devine Tex
Anthony Blum
Durham Tex
J C Edgar
Duval Tex
J A Feddeman
Eastland Tex
F E Black (Fay Tex)
Care Obs Weather Bur
El Paso Tex
H Graves (Epworth)
Hale City Tex
Henry T Williams
(Flower Bluff)
Corpus Christi, Tex
J N Morris
Forestburgh Tex
Post Surgeon Fort Brown
Brownsville Tex
Post Surgeon
Ft Clark Brackettville Tex
Post Surgeon
(Camp Eagle Pass)
Eagle Pass Tex
Post Surgeon
Ft Hancock Tex
Post Surgeon
Ft McIntosh Laredo Tex
Post Surgeon
Camp Pena Colorado
Marathon Tex
Post Surgeon Ft Ringgold
Rio Grande City Tex
Genl F M Clark
Fort Worth Tex
A Striegler
Fredericksburgh Tex
D F Ragsdale
Gainesville Tex
D D Bryan
Galveston Tex
I M Cline
Galveston Tex

A B Grant
Graham Tex
W J Crowley
Grape Vine Tex
Dr J E Lay
Hallettsville Tex
F Lusby
Hartley Tex
K D Blankenship
Highland Tex
J C Rickli
(Kent) Fort Davis Tex
Fritz Presun
La Grange Tex
R L Cook
Leakey Tex
Capt J W Davis
Llano Tex
G L Stone
McGregor Tex
Louis Runge
Menardville Tex
S G Lackey
Mesquite Tex
Dr J C Riley
Mountain Spring Tex
R C Monk
Nacogdoches Tex
Capt Julius Geisecke
New Braunfels Tex
C Runge
New Ulm Tex
A L Rush
Ochiltree Tex
E H Snider
Panter Tex
Robert H Henry
Quanah Tex
Hamilton Foster
Roby Tex
Capt Robt Strachan
Rockport Tex
Thos Wood
Round Rock Tex
T H C Perry
Seymour Tex
Gus A Duerler jr
San Antonio Tex
G H Hutchins
Sierra Blanca Tex
C M Tilford
(Silver Falls)
Mt Blanco Tex
Prof H A Evans
Sulphur Springs Tex
W Goodrich Jones
Temple Tex
G W Henrichson
Twohig Tex
Erskin B Barden
Victoria Tex

Utah.

Henry Fennimore
Beaver Utah
F W Quinn
Bingham Utah
R Forrester
Castle Gate Utah
Agent R G & W R R
Cisco Utah
Willard Rogers
Deseret Utah
J J Starley
Fillmore Utah
Post Surgeon
Fort Duchesne Utah
Agent R G & W R R
(Green River)
Castle Dale Utah
B F Cooke
Grouse Creek Utah
John Crook
Heber Utah
F Blumel (Lake Park)
Farmington Utah

William Brown
Levan Utah
Thos A Jeffery
Loa Utah
James Dryden
Utah Exp Sta
Logan Utah
E Caffall
Losce Utah
Agent R G & W R R
Manti Utah
R Moncur
Mt Carmel Utah
H Crouse
Moab Utah
W W Crossman
Ogden Utah
Alex Matheson
Parowan Utah
T H Martin
Provo City Utah
Sarah Johnson
Richfield Utah
G N Salisbury X
Salt Lake City Utah
Agent R G & W R R
Schofield Utah
J Robbins
Snowville Utah
James Hughes
Stockton Utah
Agent R G & W R R
Thistle Utah

Vermont.

W H Childs
Brattleboro Vt
W B Gates
55 Elmwood Avenue
Burlington Vt
H L Bixby
Chelsea Vt
C H Lane
Cornwall Vt
J H Mears
Enosburgh Falls Vt
E A English
Hartland Vt
Hon Geo E Stratton
Hyde Park Vt
Miss Martha French
Jacksonville Vt
G H Manchester
Norwich Vt
Maj W O Cartwright
Saxtons River Vt
Mrs J J Allbee
Simonsville Vt
C E Brown
South Royalton Vt
H F J Scribner
Strafford Vt
A Whitehead
Vernon Vt
R E Pember
Wells Vt
H F Dunham
Woodstock Vt

Virginia.

Edw L C Scott
Ashland Va
D MacGregor
Avon Va
J W Fox Sr
Big Stone Gap Va
W N Stone
Bedford City Va
C R Moore
Birdsnest Va
W O Frith
Blacksburgh Va

A H Tuttle
Charlottesville Va
A E White
Clifton Forge Va
D A Heatwole
Dale Enterprise Va
H W Weiss
Emporia Va
Albert Olszewski
Falls Church Va
C W Richardson
Hot Springs Va
Prof Edward Kinne
Irwin Va
Prof H D Campbell
Lexington Va
J N Ryker X
Lynchburgh Va
A T Lincoln
Marion Va
R V Gaines
Mossing Ford Va
G Dunn
Nottoway C H Va
Prof J M Colson Jr
Petersburgh Va
W H Pleasants
Richmond Va
Prof S C Wells
Salem Va
L S Bristow Jr
Saluda Va
B W Jones
Spottsville Va
W N Parrott
Stanardsville Va
W C Hedrick
Staunton Va
W B Steele
Stephens City Va
Clifford H Constable
Warsaw Va
H J Heuser
Wytheville Va

Washington.

W B Mack
Aberdeen Wash
J W Bird
Anacortes Wash
W H Mossman
Chehalis Wash
Charles Johnson
Chelan Wash
Buffum Bros
Clyde Wash
Adam Stoneberger
Colfax Wash
C Bicknell
Corvallis Wash
Rev S R S Gray
East Sound Wash
Ruth Kernahan
(Elbe) Eatonville Wash
Samuel Thompson
Ellensburg Wash
Frank Oviatt
Ferry Wash
Jno W Clendening
Fort Simcoe Wash
Post Surgeon
Fort Spokane
Miles Wash
Post Surgeon
Fort Townsend
Port Townsend Wash
R M Hoskinson
Madrone Wash
H B Scudder
North Yakima Wash
R C Willis
Olga Wash

Observer Weather Bureau X
Olympia Wash
Thomas M Whitcomb
(Pine Hill) Lyle Wash
Hon F W D Mays
Pomeroy Wash
Hans Mumm
Rosalia Wash
Alpheus Byers
Seattle Wash
Wm Van Woert
Silver Creek Wash
Dr C P Culver
Tacoma Wash
Prof L P Venen
Vashon Wash
R W Starr
Waterville Wash

West Virginia.

B P Ferrill Box 700
Bluefield W Va
Dr D T E Casteel
Buckhannon W Va
J Benninger
Central Station W Va
Jno H Wood
Danville W Va
A Thompson
Davis W Va
J J Tierney
Elkhorn W Va
Henry Resseger
Ella W Va
Levi Johnson
Glenville W Va
O G Augir
Grafton W Va
Lon H Hutchinson
Huntington W Va
J E Murdock
Kingwood W Va
Geo W Van Metre
Martinsburgh W Va
West Virginia University
Morgantown W Va
John W Chapman
New Cumberland W Va
N Bandi
New Martinsville W Va
L W Nuttall
Nuttallburgh W Va
T G Field
Parkersburgh W Va
W W Dent X
Parkersburgh W Va
D Titchnell
Pleasant Hill W Va
W D Holmes
Point Pleasant W Va
W C Diller
Romney W Va
Ed Corder
Spencer W Va
G H Trembly
Tannery W Va
Christian Schnepf
Wheeling W Va

Wisconsin.

A J Smith
Amherst Wis
Clem F Kimball
Appleton Wis
Wm Toole
Baraboo Wis
E W Pierce
Barron Wis
Prof F W Denison
Bayfield Wis
Prof H B Hubbell
Beaver Dam Wis

L M Burt
Black River Falls Wis
R P Goellner
Butternut Wis
B C Curtis
Cadiz Wis
R C Worthington
Centralia Wis
John Erb
Columbus Wis
Hon John Masbaum
Crandon Wis
E S Austin
Delavan Wis
Joseph G Lawton
De Pere Wis
Rev W N Sloane
Eau Claire Wis
J E Breed
Embarrass Wis
John Halter
Florence Wis
J C Wedge
Fond du Lac Wis
James C Jensen
Grantsburgh Wis
W J Egbert
Hammond Wis
S N D Smith
Harvey Wis
Prof E V Wernick
Hillsborough Wis
Prof E P Frost
Hudson Wis
E B Heimstreet
Janesville Wis
Rev A Brown
Juneau Wis
E S Koepenick
Koepenick Wis
Edward Pollock
Lancaster Wis
A J Looze
Lincoln Wis
Washburn Observatory
Madison Wis
Miss Clasina Lups
Manitowoc Wis
J H Treat
Meadow Valley Wis
Dr F Robert Zeit
Medford Wis
A Pillsbury
Menomonie Wis
W L Moore X
Milwaukee Wis
P W Peterson
Mineral Point Wis
Wm Heaslett
Neillsville Wis
Aug A Paulsen
New Holstein Wis
John Bender
Oconomowoc Wis
W K Smith
Oconto Wis
C W Staples
Osceola Mills Wis
J Rufus Hunter
Oshkosh Wis
Dr O G Frink
Pepin Wis
R C Kann
Port Washington Wis
Frank Cornelius
Prairie du Chien Wis
Rev E M Corey
Raymond Wis
Allen B West
Reedsburg Wis
R W Fish
Rhineland Wis

J G Skeels
Sharon Wis
Col W S Wood
Shawano Wis
E R Daniels
Shell Lake Wis
E W Crane
Sparta Wis
J N King
Valley Junction Wis
F W Alexander
Viroqua Wis
Chas J Salick
Watertown Wis
O V B Dey
Waukesha Wis
Robert Reynolds
Weston Wis
W Phillips
Westfield Wis
W D Buchholz
Whitehall Wis

Wyoming.

W D Pickett
(Big Horn Ranch)
Arland Wyo
O K Garvey
Casper Wyo
E M Ravenscraft X
Cheyenne Wyo
Chas A Morrison
Evanston Wyo
Post Surgeon
Fort McKinney Wyo
Post Surgeon
Camp Pilot Butte
Rock Springs Wyo
Post Surgeon
Fort Yellowstone
Mammoth Hot Springs Wyo
Post Surgeon
Fort Washakie Wyo
J S Meyer
Lander Wyo
Prof B C Buffum
Laramie Wyo
F S Lusk
Lusk Wyo
J D Parker
Saratoga Wyo
Sundance Exp Farm
Sundance Wyo
M R Johnston
Wheatland Wyo

Foreign.

Dr C F Hering
Burnside (Coronie)
Colony of Surinam
Dutch Guiana S A
G J Gibbs
Grand Turk
Turks Islands Brit W I
Wm S Barr
Hamilton Bermuda
Prof M Leal
Leon Guanajuato Mexico
J C Herring
Topolobampo
Sinaloa Mexico
Prof G Baturoni
Vera Cruz Mexico
Prof P Scherer
Meteorological Obs'y
Port au Prince Hayti
Director Catholic Institute
Puebla Mexico
H Patrick
La Logia
Sinaloa Mexico
Dir Astro & Met'l Obs'y
Mazatlan Mexico

ANNUAL SUMMARY FOR 1892.

The following general discussion of the weather over the United States during 1892 is based upon seven charts, published herewith, which show, respectively: I. The annual mean atmospheric pressure and the prevailing winds. II. The annual mean temperature and the departure from the normal temperature. III. The maximum temperature. IV. The minimum temperature. V. The absolute ranges of temperature. VI. The annual precipitation. VII. The departure of the annual precipitation from the normal precipitation. These charts have been prepared from data, published herewith, received from 1,669 regular and voluntary observers of the Weather Bureau.

ATMOSPHERIC PRESSURE.

The annual mean pressure was highest east of the Mississippi and south of the Ohio rivers, where it was above 30.10, and was lowest over the Canadian Maritime Provinces and the west part of the southern plateau region, where it was below 29.95. Over the greater part of the country east of the 100th meridian and south of a line traced from Lake Superior to New Jersey, and along the immediate middle and north Pacific coasts the mean pressure was above 30.05. In eastern New England, on the northeast slope of the Rocky Mountains, and over the southwestern plateau region and the interior of California the mean values were below 30.00.

TEMPERATURE.

The annual mean temperature was highest in the lower Colorado and lower Gila valleys, and at Key West, Fla., where it was above 75°. It was above 70° over the southern half of the Florida Peninsula, in extreme southern Texas, and in adjoining parts of western Arizona and southern California, and was above 60° south of a line traced from southern North Carolina westward to southern New Mexico. The mean values were also above 60° over the southwest half of Arizona, and in southern and interior parts of California. The annual mean temperature was lowest on the north shore of Lake Superior, in the Saskatchewan Valley, and at mountain stations in central Colorado, where it was below 35°. The mean readings were below 40° in Quebec, in the Lake Superior region, and in northern Minnesota, North Dakota, and northeastern Montana. Over northern New England and northern New York, and north of a line traced from Lake Ontario to eastern Wyoming, thence to north-central New Mexico, and thence northwestward over the northern plateau region the mean temperature was below 45°. The mean values were generally below 50° over the northern half of the country east of the Rocky Mountains, and over the plateau region, save in southwestern Arizona.

DEPARTURE FROM NORMAL TEMPERATURE.

The mean temperature was below the normal east of the Mississippi River and south of the Great Lakes, in an area extending from central New York over southern Maine, in the upper Saskatchewan valley, and generally over the middle and southern plateau and the middle Rocky Mountain regions. The most marked departure below the normal temperature was noted at Cincinnati, Ohio, where the mean reading was 2° below the annual normal temperature. In an irregular area extending from the upper Mississippi valley to the west Gulf states and the south Atlantic coast, and at Portland, Me., Oswego, N. Y., and Winnemucca, Nev., the mean values were 1° or more below the normal. In northern Alberta the mean temperature was 1° to 2° lower than usual. The greatest departure above the normal temperature was reported at Chatham, N. B., where it was 4°. The departure above the normal was 2° at Sydney, C. B. I., and Rockcliffe,

Ont., and exceeded 1° over eastern and northern Maine, the greater part of Ontario, in the Red River of the North Valley, western South Dakota, east-central Texas, central New Mexico, and western Washington.

YEARS OF HIGHEST MEAN TEMPERATURE.

Exceptionally high annual mean temperatures were not reported for 1892.

From Colorado and the southeast slope of the Rocky Mountains over the interior of the Gulf States to the south Atlantic coast the highest annual mean temperature occurred in 1890; from the north Pacific coast to the middle Missouri and Red River of the North valleys in 1889; from Kentucky over the middle and upper Ohio valleys, Pennsylvania, Maryland, southern New York, and southern New England in 1881; and from the lower Missouri and upper Mississippi valleys over the Lake region in 1878.

YEARS OF LOWEST MEAN TEMPERATURE.

At Key West, Fla., 22 years record, the annual mean temperature, 76°.7, was 0°.2 lower than the lowest annual mean temperature previously reported at that station, noted in 1886. Over the Southern States east of the Rocky Mountains the lowest annual mean temperature occurred in 1885 and 1886; from the Missouri Valley over the Ohio Valley, the Lake region, and the middle Atlantic and New England states in 1875 and 1885; from the middle-eastern slope of the Rocky Mountains over the valley of the Red River of the North in 1883; and in the Pacific coast states in 1880.

MAXIMUM TEMPERATURE.

At Concordia, Kans., the maximum temperature of the year, 104°, noted July 21st, was the highest temperature recorded at that station during the eight-year period of observation. At Eastport, Me., and Block Island, R. I., the maximum temperature, 88°, noted July 26th and July 28th, respectively, was as high as previously reported at those stations. The highest temperature registered at a regular station of the Weather Bureau in 1892 was 116° at Yuma, Ariz., June 20th. At Fresno, Cal., a maximum of 112° was noted August 18th. The maximum values were above 100° in the middle and upper Missouri valleys, generally on the eastern slope of the Rocky Mountains, over the plateau regions, and in the central valleys of California. At Philadelphia, Pa., a reading of 101° was observed July 26th, and the temperature reached 100° at Lynchburg, Va., July 27th. Reports of voluntary observers show maximum temperature above 120° in the Colorado Desert, Cal., in June. At stations on the south and east New England, Carolina, Washington, Oregon, and north and south California coasts the maximum temperature was below 90°. At Key West, Fla., the maximum temperature of the year was 90°, and at Eureka, Cal., the highest temperature, 69°, was reached October 8th.

MINIMUM TEMPERATURE.

The lowest temperature for the year reported by a regular station of the Weather Bureau was -45° at Miles City, Mont., January 18th. On January 15th the minimum temperature at Saint Vincent, Minn., was -42°. The line of zero temperature is traced from Boston, Mass., to northwestern Ohio. This line describes a loop over West Virginia, western Virginia, and western North Carolina, and is traced from southern Ohio southwestward to northern Texas, thence to central Arizona, and thence irregularly northward over Nevada, eastern Oregon, and eastern Washington. The line of freezing weather crosses the Florida Peninsula just north of Titusville and Tampa, and is traced inside the California coast line south of the 40th parallel. The lowest temperature reached at Key West, Fla., was 53° on March 19th. The coldest weather in the Gulf and

south Atlantic states occurred December 27th and 28th, when the minimum temperature reached 25° at Galveston, Tex., 23° at New Orleans, La., and 20° at Mobile, Ala., on the 27th, and 13° at Atlanta, Ga., and 25° at Savannah, Ga., on the 28th. The lowest temperature was reached in Florida January 4th, March 19th, and December 29th, when the temperature fell below freezing to about the 29th parallel.

TEMPERATURE RANGES.

The greatest range of temperature for the year, 150°, was noted at Miles City, Mont. The range for the year exceeded 120° from the middle Missouri valley, western Iowa, and Minnesota to the Rocky Mountains, and was more than 100° from the east part of the middle and northern plateau region to Wisconsin, and at Northfield, Vt. The least yearly range of temperature, 37°, was noted at Key West, Fla., and the range at Eureka, Cal., was 38°. At stations on the immediate south Atlantic and Gulf coasts, over the Florida Peninsula, and in western parts of Washington, Oregon, and California, the yearly range of temperature was less than 70°.

PRECIPITATION.

The greatest precipitation for the year, 109.67 inches, was reported at Neah Bay, Wash. The yearly precipitation exceeded 70.00 inches along the Washington coast, on the California coast somewhat south of Eureka, at stations on the Central Pacific Railroad crossing the Sierra Nevada Mountains, in an area in southwestern Arkansas, and at Mobile, Ala. In Nova Scotia, at points on the Florida and south Atlantic coasts, generally over the middle Gulf states, northeastern Texas, Arkansas, and Tennessee, in areas in northern California, and along the Oregon and Washington coasts the yearly amount exceeded 50.00 inches. From the Saint Lawrence River, the Lake region, and the upper Mississippi and lower Missouri valleys to the middle and east Gulf and Florida coasts, the yearly precipitation exceeded 30.00 inches, and over the greater part of that region, save in the Southern States, the amount ranged from 30.00 to 50.00 inches. The least precipitation for the year was noted at stations in the Colorado Desert, Cal., and in the lower Colorado valley, Arizona, where the aggregate amount was less than 5.00 inches. Less than 10.00 inches was reported generally over the middle and southern plateau regions and in southeastern California. The yearly precipitation was generally less than 20.00 inches on the northeast slope of the Rocky Mountains and from the Rocky to the Sierra Nevada Mountain ranges.

DEPARTURE FROM NORMAL PRECIPITATION.

The yearly precipitation was deficient in the Atlantic coast states, the Ohio Valley, the northern lake region, along the east and west Gulf coasts, and generally in the Rocky Mountain and plateau regions. On the middle and south Pacific and Washington coasts, in the eastern Saskatchewan valley, and from the upper Missouri and upper Mississippi valleys to the middle Gulf coast more than the usual amount of precipitation was reported. The precipitation was also in excess at Walla Walla, Wash., over southern Ontario, in the upper Saint Lawrence valley, and over western Nova Scotia. The most marked deficiency was noted at Galveston, Tex., where less than one-half the usual amount of rain fell. At Eastport, Me., Key West, Fla., and Portland, Oregon, less than seven-tenths of the usual amount of precipitation was reported. At Valentine, Nebr., the annual precipitation was about one-half greater, and generally in an area extending from the upper Mississippi and middle Missouri valleys and the middle-eastern slope of the Rocky Mountains to northeastern Texas and the middle Gulf states it was one-tenth to three-tenths greater than the normal amount. At San Diego, Cal., the amount for the year, 9.09, was two-tenths greater than the average for that station.

YEARS OF GREATEST PRECIPITATION.

At Montgomery, Ala., and Palestine, Tex., the annual precipitation was the greatest ever reported by 5.85 inches, and 1.53 inch, respectively. The heaviest rainfall previously noted at Montgomery occurred in 1873, and the heaviest annual precipitation for preceding years was reported at Palestine in 1888.

The greatest annual precipitation commonly occurs on the extreme north Pacific coast, where it averages about 102 inches at Neah Bay. In 1886 the precipitation at that station was 123.23 inches, and in 1891 it was 121.21 inches. On the middle and south Pacific coasts the greatest yearly precipitation occurred in 1884, when it varied from 34.92 inches at Sacramento, Cal., and 38.82 inches at San Francisco, Cal., to 40.39 inches at Los Angeles, Cal., and 27.59 inches at San Diego, Cal. The heaviest precipitation noted for the southern plateau region also occurred in 1884, when it varied from 5.86 inches at Yuma, Ariz., to 18.30 inches at El Paso, Tex., and 23.50 inches at Fort Stanton, N. Mex. From the Missouri Valley over the extreme upper Mississippi valley and the western lake region the yearly precipitation was greatest in 1881; in the middle and upper Mississippi and Ohio valleys in 1876 and 1882; in the lower lake region, New York, and central New England in 1878; in the middle Atlantic states in 1889; and on the North Carolina coast in 1877.

YEARS OF LEAST PRECIPITATION.

At the following-named regular stations of the Weather Bureau the precipitation for 1892 was the least ever reported by the amounts given: Eastport, Me., 32.20 inches, 4.24 inches less than for 1891; New London, Conn., 34.75 inches, 4.60 inches less than for 1878; New Haven, Conn., 37.78 inches, 0.54 inch less than for 1885; Kittyhawk, N. C., 38.39 inches, 4.25 inches less than for 1891; Hatteras, N. C., 52.88 inches, 1.84 inch less than for 1886; Augusta, Ga., 39.27 inches, 0.63 inch less than for 1883; Key West, Fla., 24.91 inches, 5.22 inches less than for 1886; Galveston, Tex., 24.78 inches, 26.20 inches less than for 1879; and Fort Stanton, N. Mex., 11.34 inches, 1.23 inch less than for 1885. From the north Pacific coast over North Dakota, and over Lower Michigan and the interior of the east Gulf states the least precipitation occurred in 1889; in Iowa in 1887; in Arkansas in 1885; and at points on the south Pacific and south Atlantic coasts in 1881.

NOTABLE METEOROLOGICAL FEATURES OF 1892.

The principal cold wave of January appeared in the Northwest on the 16th, and reached the Atlantic coast the night of the 19-20th. Attending this cold wave the temperature fell 40° to 45° below zero in eastern Montana and North Dakota, the line of zero temperature reached northern Texas, cold weather caused loss of stock on the ranges from Kansas to Texas, and vegetation on the west Gulf coast was killed by frost. Heavy frost occurred as far south as Jupiter, Fla., the morning of the 3d. Heavy rain the middle part of the month caused high water in the streams of the eastern and southeastern states and in the Ohio River and tributaries. Severe local storms occurred in the east Gulf and south Atlantic states on the 5th and 6th. At Fayetteville, Ga., 3 persons were killed, a number were injured, and property to the value of \$30,000 to \$50,000 was destroyed by a tornado. The upper Mississippi and middle and upper Missouri rivers were frozen throughout the month. The Mississippi River was frozen over at Saint Louis, Mo., and at points thence southward to Cairo, Ill., during a great part of the last half of the month. Navigation on the Ohio River was interrupted by floating ice.

In February the principal cold wave advanced from the Northwest to the Atlantic coast from the 13th to 16th, and frost occurred over the Florida Peninsula as far south as Jupiter. Ice in the Saint Clair River broke up the early

part of the month. An unusually heavy ice gorge in the Allegheny River near Red Bank broke on the 20th. Unusually brilliant auroral displays were observed generally over the United States on the 13th.

In March cold and frost on the 11th and 12th injured vegetation in the Gulf and south Atlantic states. Low temperature and frost from the 17th to 19th seriously injured vegetation in the Southern States. On the 16th and 17th the snowfall in central and southwestern Tennessee was the heaviest on record for that section, the depth of snowfall varying from 7 to 25 inches. On the 31st heavy gales and destructive local storms occurred from Nebraska and Iowa to central Texas. Tornadoes were reported at points in south-central Nebraska, central Kansas, and central Texas. The loss of human life by this group of tornadoes was placed at 34 in Kansas and 2 in Texas, and the estimated value of property destroyed in Kansas was \$150,000, and in Texas \$12,000. Navigation was partially resumed on Lakes Ontario, Erie, and Michigan, and on the upper Mississippi river.

In April cool and wet weather delayed farming operations in the Pacific coast states, the Dakotas, Nebraska, parts of Kansas and Indian Territory, and in Minnesota, Iowa, Missouri, and Louisiana. In Florida oranges and small fruits were injured by drought. A scarcity of water and grass caused a great loss of live stock on the ranges of southern and western Texas and New Mexico. Frost on the 10th and 11th injured tender vegetation from Tennessee to the Carolina coast, and on the 16th frost occurred in the Carolinas and Georgia. Heavy snow the early part of the month caused a great loss of live stock in the Black Hills region of South Dakota and Wyoming. In the early part of the month streams in the lower Ohio valley, Tennessee, Mississippi, Alabama, and New York rose rapidly, and great damage was caused by flood in Tennessee, northern Alabama, and Mississippi. At the close of the month the Mississippi River was above the danger-line from Cairo to the Gulf. The Red River of the North overflowed its banks at Saint Vincent, Minn., on the 10th.

In May cold and wet weather interfered with farming operations from the Mississippi River to the Rocky Mountains. Immense damage to property was caused by flood along the Mississippi River and tributaries. About 60,000 acres of cultivated land in the American Bottom, opposite Saint Louis, Mo., were submerged. The Mississippi River reached high-water mark at New Orleans, La., and plantations were inundated in various parts of Louisiana. The Missouri River flooded low-lying parts of Kansas City and suburbs. Great devastation by flood was reported along the Illinois River. Flood in the Floyd Valley, Iowa, resulted in the loss of about 20 lives, and destruction of property to the estimated value of \$1,000,000. At Fort Smith, Ark., the Arkansas River reached the highest stage on record; about 10,000 acres of cultivated land in that section were overflowed. At Little Rock, Ark., the stage of water was the highest reached since 1844. Destructive floods occurred along the Red River in Texas and Louisiana. At Shreveport, La., the river reached the highest stage ever noted at that point. At the close of the month the Willamette River was over the lower docks at Portland, Oregon.

In June excessive rainfall interfered with farming operations in western Pennsylvania, northern Ohio, and Wisconsin. The warmest weather on record for June was reported at stations in the middle Atlantic and New England states on the 13th and 14th. At stations in western Florida, Louisiana, and the middle Missouri valley the month was the coolest June on record. At stations in the Lake region and northwestern New England the monthly precipitation was the greatest, and in parts of Kansas and Nebraska it was the least on record for June. The Arkansas River reached a maxi-

mum stage at Little Rock, Ark., on the 6th. At New Orleans, La., the Mississippi River reached the highest stage on record, 17.6 feet, on the 11th. At Davenport, Iowa, the Mississippi reached the highest stage on record on the 27th. On the 24th the Missouri River reached the highest stage on record, 18.1 feet, at Fort Buford, N. Dak. Destructive floods occurred during the month in Indiana, Illinois, Missouri, northwestern Pennsylvania, and Vermont.

Exceptionally warm weather prevailed east of the Rocky Mountains during the second and third decades of July. In the east Gulf states excessive rainfall damaged crops. In parts of New England, the Ohio Valley, and the interior of Texas vegetation was damaged by drought. The Mississippi River subsided slowly, and at the close of the month was below the danger-line, save at New Orleans. High water in the Tombigbee, Warrior, Alabama, Coosa, and Pearl rivers resulted in considerable loss of property and crops in Mississippi and Alabama.

Exceptionally warm weather continued over the eastern part of the country during the first decade of August. The month was unusually dry in the middle Atlantic states. In a number of the Western States drought was broken by general rains on the 9th. On the 30th heavy gales caused loss of life and considerable damage to shipping on the upper lakes.

Over a great part of the Rocky Mountain region the month of September, 1892, was the warmest and driest September on record. The month was also very dry in the Missouri Valley, and in parts of Wisconsin and eastern Kentucky. The monthly precipitation was in excess on the south Atlantic, middle Gulf, and extreme north Pacific coasts.

In the Atlantic coast states, and in parts of the Ohio and upper Mississippi valleys and Tennessee October, 1892, was the driest October on record. In Indian Territory excessive rainfall damaged crops. A destructive storm prevailed over the Great Lakes on the 28th and 29th. Many vessels were wrecked or damaged and loss of life was reported.

November was an unusually stormy month. Heavy rains from the 17th to the 23d caused great damage by flood on the north Pacific coast. Unusually severe gales and exceptionally heavy rain prevailed over the greater part of California from the 24th to the 30th. Low temperature from the 9th to the 13th damaged cotton in parts of Arkansas and Louisiana. The first heavy frost of the season occurred at Jacksonville, Fla., on the 12th. The Mississippi River was frozen from Keokuk, Iowa, northward, and the Missouri River was closed by ice in North and South Dakota. On the 1st snow impeded travel in Colorado. A destructive tornado visited Galveston Island, Texas, the early morning of the 6th; one life was lost and property to the estimated value of \$10,000 was destroyed. A tornado occurred in Boone county, Ark., the night of the 16th; 3 persons were reported killed, 50 injured, and the estimated value of property destroyed was \$100,000. The early morning of the 17th a tornado visited Red Bud, Ill., killing 2 persons and injuring 7, and wrecking 82 buildings.

The severest cold wave of December overspread the Southern States from the 26th to the 29th, causing some damage by cold and frost in the Gulf States and Florida. The advance of this cold wave was attended by snow over the east Gulf and south Atlantic states. Over a large part of those districts the snowfall was exceptionally heavy. Heavy rains from the 1st to the 3d flooded streams in California. From the 20th to the 23d a heavy snowstorm prevailed over the north Pacific coast states. Heavy rain from the 21st to the 25th caused destructive floods in the Sacramento and San Joaquin valleys, California. Tornadoes occurred in northeastern Texas and northeastern Arkansas on the 6th. Navigation on the Great Lakes and in the rivers of the Middle and Northern states was closed by ice.

Annual summary for 1892—Weather Bureau stations.

State and station.	Temperature—degrees Fahrenheit.						Precipitation in inches.		
	Mean annual.	Departure from normal.	Extremes of 1892.				Total 1892.	Departure from normal.	Percentage of normal.
			Max.	Date of max.	Min.	Date of min.			
<i>Alabama.</i>	0	0	0		0		Inches.	Inches.	
Auburn	61.5	-1.3	94	June 15	10	Dec. 28	49.17	-3.25	94
Mobile	65.8	-0.9	95	June 10	20	Dec. 27	74.11	-11.46	118
Montgomery	64.6	-0.8	96	June 15	20	Dec. 28	69.85	-16.95	132
<i>Arizona.</i>									
Tucson	66.3	-0.9	107	June 20	16	Dec. 16	9.61	-3.62	73
Yuma	72.2	-0.1	116	June 20	28	Dec. 19	3.35	+0.21	107
<i>Arkansas.</i>									
Fort Smith	59.7	+0.3	100	Aug. 6	-2	Jan. 19	49.35	+4.14	109
Little Rock	60.4	-1.2	96	Aug. 5	10	Dec. 27	62.13	+7.92	115
<i>California.</i>									
Eureka	51.4		69	Oct. 8	31	Dec. 13	39.48		
Fresno	63.1		112	Aug. 18	27	Dec. 15	8.75		
Keeler	60.7	-0.1	103	Aug. 1	23	Feb. 9	2.79	-0.99	74
Los Angeles	61.6	+0.2	99	May 18	35	Dec. 12	18.72	+0.34	102
Point Reyes Light	51.7		80	May 19	34	Jan. 11	28.88		
Red Bluff	62.2	-0.8	108	Aug. 18	28	Dec. 21	33.48	+7.21	127
Sacramento	60.2	+0.6	106	Aug. 18	26	Dec. 16	23.60	+1.74	108
San Diego	60.2	-0.6	87	May 18	36	Dec. 18	9.09	+1.79	120
San Francisco	55.8	-0.2	92	Aug. 17	38	Dec. 10	22.08	+2.06	109
<i>Colorado.</i>									
Denver	48.9	-0.4	98	Aug. 14	-17	Jan. 11	15.02	+0.35	102
Montrose	48.0	-0.5	94	Aug. 16	-11	Jan. 14	9.03	-0.33	96
Pueblo	51.2		101	Aug. 3	-18	Dec. 15	14.78		
<i>Connecticut.</i>									
New Haven	49.0	-0.4	96	July 26	0	Jan. 27	37.78	-12.44	75
New London	48.8	-0.7	92	July 26	-2	Jan. 27	34.75	-14.34	71
<i>District of Columbia.</i>									
Washington	54.0	-0.7	99	July 26	4	Jan. 17	42.34	-2.32	95
<i>Florida.</i>									
Jacksonville	68.3	-0.7	96	Aug. 1	29	Mar. 19	41.59	-13.24	76
Jupiter	72.6		93	May 22	34	Jan. 4	63.25		
Key West	75.7	-1.5	90	Sept. 8	53	Mar. 19	24.91	-15.10	62
Mico	71.7		101	Aug. 12	30	Jan. 4	44.59		
Pensacola	67.0	-0.7	94	June 11	23	Dec. 27	44.02	-18.11	71
Tampa	71.0		94	July 28	33	Mar. 19	46.66		
Titusville	70.2		93	July 20	33	Dec. 29	47.70	-6.33	88
<i>Georgia.</i>									
Atlanta	59.6	-1.4	94	July 24	13	Dec. 28	49.87	-4.59	91
Augusta	63.0	-1.0	97	July 30	23	Nov. 8	39.27	-9.12	81
Savannah	65.6	-1.0	97	July 29	25	Dec. 28	42.52	-9.18	82
<i>Illinois.</i>									
Cairo	56.8	-1.0	94	July 25	0	Jan. 20	38.71	-4.99	88
Chicago	46.6	-1.9	94	July 25	-10	Dec. 26	36.56	+1.01	103
Springfield	51.0	-1.4	95	Aug. 8	-7	Dec. 26	42.47	+3.38	109
<i>Indiana.</i>									
Indianapolis	52.0	-0.7	97	July 24	-5	Jan. 20	39.77	-5.40	88
<i>Iowa.</i>									
Davenport	48.0	-1.2	94	July 25	-12	Jan. 19	44.15	+9.28	126
Des Moines	47.7	-0.6	95	Aug. 8	-26	Jan. 19	38.42	+3.36	109
Dubuque	46.6	-1.1	95	July 26	-18	Jan. 19	48.77	+11.12	129
Keokuk	50.5	-1.0	95	Aug. 5	-16	Jan. 19	37.45	+1.43	104
Sioux City	46.9		100	July 19	-28	Jan. 19	26.38		
<i>Kansas.</i>									
Concordia	51.9	+0.6	104	July 21	-24	Jan. 19	28.41	+2.64	110
Dodge City	52.4	-0.6	103	Aug. 5	-11	Jan. 19	19.66	-1.28	94
Leavenworth	52.5	-0.6	98	Aug. 5	-20	Jan. 19	40.09	+1.90	105
Topeka	53.1		100	July 21	-23	Jan. 19	41.46		
Wichita	54.7		100	Aug. 7	-14	Jan. 19	29.94		
<i>Kentucky.</i>									
Lexington	54.1		97	July 24	6	Jan. 7	45.96		
Louisville	55.8	-1.0	96	July 25	4	Dec. 26	38.13	-9.06	81
<i>Louisiana.</i>									
New Orleans	68.1	-0.9	93	July 24	23	Dec. 27	56.91	-4.87	92
Shreveport	64.4	-1.0	97	July 31	17	Jan. 14	46.63	-4.17	93
<i>Maine.</i>									
Eastport	42.7	+1.5	88	July 26	-7	Dec. 24	32.20	-16.78	65
Portland	45.1	-1.0	95	June 14	-5	Dec. 24	39.15	-3.53	92
<i>Maryland.</i>									
Baltimore	54.1	-1.2	99	July 26	12	Jan. 17	45.05	+0.27	100
<i>Massachusetts.</i>									
Boston	49.4	+1.1	96	July 26	0	Dec. 24	37.02	-9.08	80
Nantucket	48.9	+0.6	87	July 27	5	Jan. 27	32.38	-9.11	78
Vineyard Haven	51.7		96	July 29	4	Jan. 29	33.26	-9.54	78
Woods Hole	48.5	-0.5	87	July 29	4	Jan. 27	39.68	-5.19	88
<i>Michigan.</i>									
Alpena	42.2	+1.4	94	June 13	-8	Feb. 16	32.15	-4.28	88
Detroit	47.6	-0.5	96	July 26	-3	Jan. 20	37.11	+4.51	114
Escanaba	41.6	+1.5	90	July 20	-15	Feb. 16	32.76	+0.95	103
Grand Haven	45.9	-0.4	90	July 25	-1	Jan. 19	31.77	-4.96	86
Manistee	43.8		90	July 23	-3	Jan. 19	35.15		
Marquette	40.6	+0.2	94	June 12	-19	Jan. 10	27.28	-5.48	83
Port Huron	45.6	+0.8	95	July 25	-4	Jan. 20	33.95	+1.79	105
Sault Ste. Marie	39.1		90	June 12	-22	Feb. 13	30.09		
<i>Minnesota.</i>									
Duluth	39.1	-0.1	93	July 31	-29	Jan. 19	28.52	-3.55	88
Moorhead	38.5	+1.7	91	Aug. 4	-37	Jan. 19	24.94	+0.37	102
Red Wing	43.5		90	July 21	-28	Jan. 19	32.32		
Saint Paul	42.8	+0.2	90	June 13	-25	Jan. 19	32.55	+5.24	119
Saint Vincent	35.5	+1.6	94	Aug. 12	-43	Jan. 15	15.34	-2.83	85

Annual summary for 1892—Weather Bureau stations—Continued.

State and station.	Temperature—degrees Fahrenheit.						Precipitation in inches.		
	Mean annual.	Departure from normal.	Extremes of 1892.				Total 1892.	Departure from normal.	Percentage of normal.
			Max.	Date of max.	Min.	Date of min.			
<i>Mississippi.</i>									
Meridian	62.5		95	July 23	15	Dec. 27	58.61		
University	61.1		94	June 15	7	Jan. 20	68.04		
Vicksburg	64.3	-1.2	95	July 25	16	Dec. 27	52.64	+ 4.59	106
<i>Missouri.</i>									
Columbus	53.1		97	July 19	-13	Jan. 19	54.62		
Kansas City	53.0		99	Aug. 5	-17	Jan. 19	43.47		
Saint Louis	55.0	-0.6	97	Aug. 8	-2	Dec. 26	41.62	+ 3.62	110
Springfield	54.5		96	July 22	-10	Jan. 19	47.80	+ 1.64	104
<i>Montana.</i>									
Havre	41.0	+0.2	98	Aug. 14	-31	Jan. 18	12.40	- 2.55	83
Helena	44.6	+1.3	94	Aug. 15	-22	Dec. 22	15.27	+ 2.74	122
Miles City	44.0		105	Aug. 15	-45	Jan. 18	11.48		
<i>Nebraska.</i>									
Crete	49.5		102	July 21	-32	Jan. 19	30.78		
North Platte	46.9	-0.7	102	July 20	-26	Jan. 12	20.37	+ 1.31	107
Omaha	49.2	-0.3	100	July 23	-26	Jan. 19	29.44	- 3.60	89
Valentine	45.9	-0.6	104	July 20	-24	Jan. 18	27.92	+ 8.99	147
<i>Nevada.</i>									
Carson City	50.1		90	June 26	2	Feb. 9	14.85		
Winnemucca	48.0	-1.5	96	July 31	3	Dec. 14	7.85	- 1.07	88
<i>New Hampshire.</i>									
Manchester	46.5		95	June 13	-3	Dec. 24	34.02	- 6.93	83
<i>New Jersey.</i>									
Atlantic City	51.3	+0.5	90	July 28	9	Dec. 24	37.27	- 5.54	87
New Brunswick	51.0		99	July 26	-1	Jan. 17	39.35	- 0.79	85
<i>New Mexico.</i>									
Fort Stanton	51.4	+1.0	94	June 29	5	Jan. 13	11.34	- 5.34	68
Santa Fe	49.1	+1.0	90	June 22	1	Jan. 13	11.62	- 2.07	85
<i>New York.</i>									
Albany	48.0	-0.1	96	June 14	-5	Jan. 27	34.83	- 3.96	90
Buffalo	46.3	0.0	88	May 31	-2	Jan. 26	45.87	+ 7.56	120
New York	51.9	+0.5	96	July 26	8	Jan. 27	38.90	- 6.57	86
Oswego	45.0	-1.5	91	Aug. 10	-6	Dec. 26	34.81	- 0.47	99
Rochester	47.1	+0.5	94	July 23	-3	Jan. 26	35.02	- 0.16	100
<i>North Carolina.</i>									
Charlotte	59.0	-1.0	97	July 28	18	Dec. 27	42.73	-10.94	80
Hatteras	60.6	-0.6	89	June 24	24	Jan. 27	52.88	-16.04	77
Kittyhawk	58.9	-0.6	95	July 27	19	Jan. 27	38.39	-22.17	63
Raleigh	58.5		98	July 28	11	Dec. 29	45.01	-10.69	81
Southport	60.9	-2.4	88	June 24	22	Nov. 25	39.51	-10.65	79
Wilmington	61.8	-1.3	96	July 28	22	Dec. 28	42.88	-13.36	76
<i>North Dakota.</i>									
Bismarck	39.3	-0.3	98	Aug. 4	-34	Jan. 18	18.17	- 0.79	96
Fort Buford	39.5	+0.9	100	Aug. 1	-40	Jan. 18	14.26	0.00	100
<i>Ohio.</i>									
Cincinnati	53.3	-2.0	98	July 24	2	Dec. 27	31.95	- 9.23	78
Cleveland	48.7	-0.1	95	July 24	-7	Jan. 20	36.51	- 0.73	98
Columbus	51.3	-0.7	97	July 25	-5	Jan. 20	33.54	- 6.74	83
Sandusky	49.4	-0.5	97	July 26	-3	Jan. 20	43.28	+ 7.88	122
Toledo	48.6	-1.2	95	July 24	-6	Jan. 20	36.70	+ 4.82	115
<i>Oklahoma.</i>									
Oklahoma City	58.0		98	July 21	-11	Jan. 19	42.29		
<i>Oregon.</i>									
Astoria	51.6	+1.7	81	June 28	27	Dec. 20	70.01	+10.93	118
Baker City	44.7		100	July 31	-12	Feb. 1	11.96		
Portland	52.9	+0.4	94	June 28	20	Dec. 22	33.58	-15.65	68
Roseburg	53.3	+0.5	96	June 27	28	Dec. 18	28.88	- 6.40	88
<i>Pennsylvania.</i>									
Erie	47.8	-1.0	90	July 25	2	Jan. 10	41.67	- 0.73	98
Harrisburg	51.0		98	July 26	8	Jan. 17	39.65	-10.17	80
Philadelphia	53.5	+0.2	101	July 26	10	Dec. 27	34.78	- 5.90	85
Pittsburg	52.1	-0.1	96	July 26	2	Jan. 20	32.66	- 5.58	85
<i>Rhode Island.</i>									
Block Island	48.8	-0.3	88	July 28	3	Jan. 27	43.06	- 1.30	97
Narragansett Pier	49.3	+1.1	93	July 25	-1	Jan. 27	43.95	- 4.63	90
<i>South Carolina.</i>									
Charleston	65.1	-0.7	95	July 29	25	Dec. 28	53.32	- 2.98	94
Columbia	63.5		101	July 30	19	Jan. 26	45.52		
<i>South Dakota.</i>									
Huron	42.3	+0.7	99	Aug. 16	-34	Jan. 18	25.17	+ 3.43	116
Rapid City	45.3	+1.2	102	Aug. 15	-25	Jan. 18	20.03	+ 2.09	112
Pierre	45.1		106	Aug. 16	-30	Jan. 18	18.81		
Yankton	46.5	+1.4	101	July 20	-32	Jan. 19	24.11	- 2.87	89
<i>Tennessee.</i>									
Chattanooga	59.3	-0.5	95	June 16	15	Jan. 7	62.68	+ 5.86	110
Knoxville						Dec. 27			
Memphis	60.6	-0.5	97	June 16	12	Jan. 15	61.46	+ 7.48	114
Nashville	58.0	-1.3	97	June 16	10	Jan. 15	50.02	- 1.99	96
<i>Texas.</i>									
Abitene	63.4	+0.3	100	June 9	2	Jan. 19	28.48	+ 4.20	117
Amarillo	55.6		100	June 9	-4	Jan. 19	15.60		
Corpus Christi	70.1		94	June 27	25	Jan. 19	20.61	-16.87	55
El Paso	63.2	-0.1	105	June 29	13	Jan. 15	5.32	- 5.21	51
Galveston	60.2	-0.7	92	Aug. 21	25	Dec. 27	24.78	-26.20	48
Palestine	65.9	+1.2	97	July 21	14	Jan. 19	61.19	+14.83	132
San Antonio	69.3	+1.0	98	June 27	19	Jan. 14	25.81	- 6.32	80
<i>Utah.</i>									
Salt Lake City	51.2	-0.4	100	Aug. 15	-1	Dec. 14	14.08	- 0.52	96
<i>Vermont.</i>									
Northfield	41.3		92	June 13	-19	Feb. 17	32.57	- 5.39	86

Annual summary for 1892—Weather Bureau stations—Continued.

State and station.	Temperature—degrees Fahrenheit.						Precipitation in inches.		
	Mean annual.	Departure from normal.	Extremes of 1892.				Total 1892.	Departure from normal.	Percentage of normal.
			Max.	Date of max.	Min.	Date of min.			
Virginia.	0	0	0		0		Inches.	Inches.	
Cape Henry	58.0	-0.6	98	July 27	20	Jan. 27	48.18	-5.28	90
Lynchburg	56.3	-0.7	100	July 27	10	Jan. 17	37.54	-5.41	87
Norfolk	58.4	-0.7	99	July 27	19	Feb. 13	49.24	-2.96	94
West Virginia.									
Parkersburg	52.4		97	July 24	0	Dec. 29	38.15	-9.41	80
Washington.									
Fort Canby	50.6	+0.2	78	May 19	29	Dec. 22	62.92	+4.26	107
Neah Bay	49.9		74	June 24	21	Dec. 21	109.67	+7.80	107
Olympia	51.0	+1.3	92	June 24	20	Apr. 27	49.41	-1.98	96
Port Angeles	47.4	+1.4	82	Aug. 19	18	Dec. 21	27.70	-1.79	94
Spokane Falls	48.4	+0.7	96	July 31	5	Jan. 10	16.78	-1.33	92
Tatoosh Island	48.6	-0.1	71	Sept. 11	22	Dec. 21	91.38	+4.63	105
Walla Walla	53.8	+0.2	105	July 30	2	Jan. 11	16.94	+1.63	111
Wisconsin.									
Green Bay	43.8	+0.6	94	July 23	-17	Jan. 15	33.02	-1.71	95
La Crosse	45.0	-1.2	93	July 27	-20	Jan. 19	36.19	+4.15	113
Milwaukee	44.6	-0.3	95	July 27	-10	Dec. 26	35.03	+2.54	108
Wyoming.									
Cheyenne	44.5	+0.1	93	July 19	-29	Jan. 11	13.50	+1.37	111
Lander	41.8		93	Aug. 15	-29	Jan. 11	17.98		

Annual summary for 1892—Voluntary stations.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
<i>Alabama.</i>	°	°		°		<i>Inches.</i>
Bermuda.....	63.2	94	July....	17	Jan....	26.40
Citronelle.....		93	June....	17	Dec....	
Claiborne Landing.....						44.78
Cordova.....						61.26
Daphne.....		105	June....	17	Dec....	
Decatur (1).....						61.99
Florence (1).....						68.18
Florence (2).....		94	June....	9	Dec....	
Gadsden.....						62.59
Greensboro.....						52.40
Healing Springs.....	64.1	97	June....	15	Dec....	65.97
Jasper.....		95	Aug....	12	Dec....	
Livingston (1).....	61.5	93	June....	16	Dec....	52.14
Lynn.....						65.07
Maysville.....		93	July....	17	Jan....	
Newburg.....	59.8	94	June....	10	Dec....	66.76
Oxanna.....		93	July....	14	Dec....	
Selma.....						58.56
Sturdevant.....						59.40
Talladega.....						60.81
Tallassee Falls.....						64.12
Tuscaloosa.....						52.95
Tuscumbia (1).....	59.7	96	June....	10	Dec....	67.93
Union Springs.....						53.64
Valley Head.....	56.6	91	July....	8	Dec....	66.79
Wilsonville.....						58.84
<i>Alaska.</i>						
Killisnoo.....	39.0	75	Aug....	10	Feb....	91.60
Metlakatla.....		75	July....	9	Nov....	
<i>Arizona.</i>						
Arizona Canal Company's Dam.....	70.6	114	Aug....	23	Dec....	8.63
Bisbee.....	60.2	99	June....	20	Jan....	12.92
Calabasas.....	61.7	101	June....	15	Dec....	11.83
Casa Grande.....	72.4	118	June....	22	Jan....	8.75
Dragon Summit.....	65.7	100	June....	22	Jan....	7.01
Dudleyville.....	65.2	110	June....	21	Dec....	10.29
Farley's Camp.....	67.0					13.24
Florence.....	68.4	114	June....	19	Jan....	9.95
Fort Apache.....	53.3	103	June....	5	Jan....	12.70
Fort Bowie.....	61.5	104	June....	18	Dec....	13.17
Fort Grant.....	62.2	105	June....	19	Jan....	7.90
Fort Huachuca.....	60.2	100	June....	9	Jan....	11.50
Fort Mohave.....	71.8	122	June....	24	Dec....	2.68*
Gila Bend (1).....	73.4	110	June....	22	Dec....	8.36
Gila Bend (2).....	70.6	120	June....	26	Dec....	6.95
Holbrook.....		102	June....	4	Jan....	6.31
Maricopa.....	74.6	115	Aug....	30	Dec....	6.05
Mount Huachuca.....	60.4	100	June....	13	Dec....	12.24
Natural Bridge.....						17.85
New River.....	67.6	108	Aug....	28	Dec....	13.48
Oracle.....	61.6	103	Aug....	20	Dec....	
Pantano.....	67.9	108	July....	25	Jan....	10.79
Payson.....	54.9	105	Aug....	2	Jan....	14.35
Phoenix (1).....	71.0	113	Aug....	20	Jan....	5.50
Red Rock.....		118	Aug....	24	Dec....	
Reynolds.....		114	June....	24	Dec....	
San Carlos.....	64.3	112	Aug....	16	Jan....	12.05
San Simon.....	69.1	110	June....	22	Jan....	2.57
Signal.....	67.9	116	June....	20	Dec....	7.70
Texas Hill.....	72.0	120	June....	27	Dec....	
Tucson (1).....	68.1	110	Aug....	21	Dec....	11.25

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.				Precipitation in inches and hundredths.	
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.		Month.
Arizona—Continued.	°	°	°		Inches.	
Tucson (2)	64.4	107	Aug	24	Dec	10.30 ⁷
Walnut Ranch	58.1	100	July	14	Dec	16.09
Whipple Barracks	59.9	101	Aug	0	Feb	12.90
Willcox	68.1	108	June.	26	Dec	8.01
Yuma	75.4	116	June.	32	Dec	1.28 ⁸
Arkansas.						
Arkadelphia						70.92
Arkansas City						50.24
Black Rock		104	July	—4	Jan	
Brinkley	60.6	98	July	8	Jan	59.46
Camden (1)						72.39
Conway	59.0	92	Aug	0	Jan	46.69
Dallas	59.2	98	Aug	3	Jan	76.58
Dardanelle						53.57
El Dorado	61.3	95	July	10	Jan	63.74
Fayetteville	55.9	97	Aug	—12	Jan	51.34
Forrest	62.5	96	July	10	Jan	56.64
Fulton						51.93
Gaines Landing						54.51
Helena (1)						61.53
Helena (2)	61.6	99	July	2	Jan	57.21
Hope	62.2	100	July	8	Jan	66.32
Hot Springs	58.3	99	July	4	Jan	66.54
Keesees Ferry	58.0	106	Aug	—13	Jan	41.34
Lonoke	62.9	100	July	9	Jan	63.48
Madding	60.4					68.86
Mount Nebo	57.5	90	Aug		Jan	51.57
New Gascony		96	Aug	9	Jan	61.51
Newport (1)						64.79
Newport (2)		100	July	8	Dec	
Oseola	58.8	93	July	4	Jan	55.17
Pine Bluff	62.8	98	July	10	Jan	72.61
Rogers				—14	Jan	46.19
Stuttgart	61.0	96	June	11	Jan	67.72
Texarkana		99	July	11	Jan	60.08
Washington (2)	61.4	93	July	8	Jan	73.42
California.						
Agnew	56.7	100	July	30	Nov	16.95
Alcalde	66.1	114	Aug	30	Dec	7.55
Alvarado		97	July	31	Dec	19.25
Anaheim	63.6	103	May	34	Dec	8.59
Antioch	61.6	104	Aug	35	Dec	16.02
Aptos	57.7	90	May	28	Dec	27.30
Arcata						39.72
Athlone	63.8	116	Aug	30	Nov	11.27
Auburn	62.1	105	Aug	34	Dec	39.56
Bakersfield (1)	66.8	110	July	26	Dec	5.42
Bakersfield (2)	61.5	110	Aug	13	Dec	5.05
Beaumont	62.8	107	Aug	29	Jan	13.51
Belmont	61.7	99	July	32	Dec	
Berendo	66.1	111	Aug	30	Dec	7.79
Berkeley	55.4	92	July	35	Dec	28.85
Bishops Creek	61.4	104	June	10	Jan	6.04
Boca	39.9	92	Aug	—20	Feb	29.05
Borden	62.3	113	Aug	27	Dec	7.00
Boulder Creek	57.4	110	Aug	24	Dec	69.91
Brentwood	61.5	105	June	31	Dec	14.69
Byron	62.1	108	Aug	28	Nov	14.19
Caliente	64.0	105	July	30	Dec	10.60
Calistoga	61.2	104	July	27	Dec	40.72
Castroville	58.3	88	May	31	Dec	16.44
Chico	62.1	110	Aug	32	Jan	36.24
Cisco	42.1	83	Aug	10	Mar	62.31
Citrus	64.0	110	Aug	18	Jan	1.56
Colfax	56.5	105	Aug	28	Dec	
Colton	61.9	108	July	30	Dec	
Corning	62.8	107	Aug	26	Nov	21.61
Crescent City						60.80
Davisville (1)	62.7	106	Aug	29	Nov	19.50
Delano	64.9	110	July	28	Dec	5.92
Delta	60.0	108	Aug	28	Feb	67.08
Downey	65.1	102	May	32	Dec	13.94
Drytown	58.6	105	Aug	27	Dec	33.90
Dunnigan	64.1	104	July	24	Dec	27.95
Dunsmuir	52.9	102	Aug	23	Jan	46.20
Edgewood	49.6	92	July	16	Dec	21.80
El Casco		116	Aug	22	Jan	
El Dorado	60.3	107	Aug	29	Dec	45.39
Elmira	60.8	106	Aug	30	Jan	27.49
El Verano	59.4	102	July	32	Jan	35.37
Emigrant Gap	47.4	87	Sept	13	Nov	64.97
Esparto	62.4	105	Aug	30	Oct	24.97
Evergreen						21.39
Farmington	62.9	112	Aug	32	Nov	20.00
Felton	59.1	108	July	24	Nov	51.78
Fernando	61.9	106	Aug	30	Dec	13.92
Florence	63.8	98	May	35	Dec	15.59
Florin	58.9	107	Aug	28	Dec	
Folsom City (1)	63.6	110	Aug	32	Dec	30.24
Folsom City (2)						28.97
Fort Bidwell	48.1	95	June	7	Dec	16.11
Fresno	66.5	117	Aug	27	Dec	6.73
Fruto	63.0	106	July	31	Dec	27.53
Galt	64.6	107	Aug	31	Mar	25.61
Georgetown	56.7	98	Aug	26	Dec	70.00
Gilroy	58.8	108	Aug	28	Dec	
Girard	56.7	99	July	23	Dec	8.50
Glen Ellen	58.2	104	Aug	27	Dec	54.28
Goshen	62.2	108	Aug	24	Dec	
Grass Valley (1)		89	July	23	Feb	58.93
Grass Valley (2)						

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
California—Continued.						
Haywards	56.7	96	July	33	Jan	20.39
Hollister	57.8	109	Aug	26	Nov	14.61
Hornbrook	53.5	100	June	18	Dec	12.81
Huron	67.0	115	July	30	Dec	5.39
Indio	73.7	112	Aug	30	Dec	
Ione	59.8	105	Aug	26	Dec	
Iowa Hill	58.4	101	Aug	30	Mar	52.59
Joan						20.74
Jalisco	56.1	99	Aug	24	Dec	39.48
Keeler	61.7	101	June	24	Jan	2.79
Keene	58.0	102	July	22	Dec	14.29
Kennedy Gold Mine	57.8	104	Aug	28	Feb	39.27
King City	60.6	110	July	28	Nov	13.33
Kingsburg	64.4	110	Aug	27	Dec	6.94
Knights Landing	61.8	110	Aug	32	Jan	21.72
La Grange		116	Aug	30	Dec	
Lathrop	61.6	106	July	30	Nov	14.15
Laurel	58.7	105	Aug	30	Feb	57.01
Lemoore	64.4	112	Aug	25	Feb	6.45
Livermore	58.7	104	July	30	Jan	22.42
Livingston	64.5	108	July	32	Jan	12.22
Lodi	60.0	106	Aug	21	Feb	24.36
Long Branch	59.8	91	May	32	Jan	
Los Angeles	62.7	101	May	32	Jan	18.93
Los Banos	64.2	106	Aug	28	Dec	8.27
Los Gatos (1)	58.5	101	July	29	Dec	37.64
Los Gatos (2)	57.2	104	July	33	Dec	44.52
Mammoth Tank	73.0	120	July	26	Dec	1.50
Martinez	58.1	94	July	32	Feb	24.41
Marysville (1)	62.7	103	Aug	30	Dec	26.48
Menlo Park	59.4	102	July	32	Feb	19.65
Merced	62.4	111	July	30	Dec	10.03
Milton (near)	60.4	108	Aug	32	Dec	
Modesto (1)	65.3	107	Aug	32	Dec	12.45
Mohave	63.9	115	Aug	25	Dec	
Monson	65.0	110	Aug	27	Dec	10.30
Montague	55.5	98	June	18	Dec	6.46
Monterey	57.9	86	July	30	Jan	17.01
Monterey (Hotel del Monte)	57.4	87	May	30	Dec	
Mountain View						21.13
Napa (1)	56.9	105	July	29	Dec	35.56
Napa (2)	56.9	98	July	31	Jan	28.74
National City	60.8	94	May	33	Dec	10.31
Needles (1)		117	Aug	30	Jan	
Newark	59.6	98	July	35	Jan	17.67
Newcastle (1)	59.7	105	Aug	30	Nov	36.25
Newhall	62.0	114	Aug	24	Dec	19.73
Newman	66.6	111	Aug	35	Dec	10.83
Niles	60.0	101	Aug	30	Dec	16.92
Nordhoff		110	Aug	25	Dec	
Norwalk	62.6	102	May	31	Dec	11.15
Oakland (1)	56.8	89	May	34	Dec	
Oakland (2)	57.9	82	May	36	Dec	23.74
Ogilby	78.7	122	June	38	Jan	2.94
Oleta		102	Aug	27	Dec	43.09
Ontario	63.6	105	Aug	32	Jan	10.54
Orland	64.5	111	Aug	33	Nov	22.13
Oroville	63.1	100	July	35	Dec	31.73
Pajaro	58.2	95	May	30	Nov	25.64
Palermo	59.8	101	Aug	26	Dec	31.44
Palm Springs	77.1	120	Aug	32	Dec	
Paso Robles	59.0	107	Aug	21	Dec	15.02
Petaluma	58.0	100	Aug	33	Jan	25.53
Placerville (1)	58.6	102	Aug	28	Jan	59.25
Placerville (2)	59.4	107	Aug	28	Jan	19.47
Pomona	60.7	102	May	28	Dec	12.77
Porterville	66.8	112	July	30	Dec	7.97
Puente	63.9	101	May	34	Dec	11.49
Ravenna	63.7	100	Aug	26	Dec	8.45
Red Bluff	65.3	113	Aug	30	Feb	27.65
Redding (1)	63.1	112	Aug	28	Dec	35.35
Redding (2)	61.4	103	Aug	26	Dec	39.63
Riverside (1)	62.2	105	May	26	Dec	8.26
Riverside (2)	63.2	105	Aug	26	Dec	6.83
Rocklin	61.7	108	Aug	32	Jan	31.52
Rumsey	65.4	108	July	32	Jan	36.31
Sacramento (1)	54.4	96	Aug	22	Dec	34.46
Sacramento (2)	61.0	97	Aug	28	Dec	16.20
Sacramento (3)	60.2	91	July	35	Dec	16.07
Salinas (1)	55.9	95	May	30	Dec	12.35
Salinas (2)	55.9	95	May	30	Dec	14.49
Salton	76.5	121	Aug	28	Jan	8.08
Sanger Junction	65.6	114	Aug	30	Dec	
San Ardo (1)	58.5	110	Aug	28	Nov	9.47
San Ardo (2)	58.9	112	Aug	26	Nov	14.03
San Bernardino	61.9	105	Aug	26	Dec	14.25
San Gabriel	62.6	99	Aug	33	Jan	17.34
San Jose (1)	58.3	100	July	34	Dec	22.53
San Mateo	56.4	92	July	35	Jan	23.56
San Miguel	61.4	112	Aug	24	Dec	10.94
San Pedro	64.1	98	May	40	Jan	12.85
Santa Ana	64.8	96	May	35	Jan	9.28
Santa Barbara (1)	59.4	98	May	38	Jan	19.37
Santa Barbara (2)	60.9	96	May	31	Jan	19.27
Santa Clara		95	July			21.08
Santa Cruz (1)	58.0	95	July	35	Nov	27.90
Santa Cruz (2)	56.4	98	July	28	Feb	27.98
Santa Margarita	56.4	100	Aug	20	Dec	27.39
Santa Maria		99	Aug			11.52
Santa Monica	60.2	90	Aug	33	Dec	16.28
Santa Paula		98	May	33	Feb	

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
California—Continued.						
Santa Rosa	58.4	97	July	30	Dec	30.43
Selma	65.6	110	Aug	28	Dec	6.75
Shasta	51.0	96	Aug	19	Dec	65.21
Shingle Springs	60.1	98	May	28	Dec	36.72
Sims	54.2	104	Aug	20	Jan	75.00
Sisson	49.6	95	May	15	Jan	37.76
Soledad	57.6	102	July	28	Dec	10.31
South Vallejo	57.6	93	July	35	Feb	17.41
Spadra	62.6	102	May	32	Dec	
Stockton (1)	59.4	104	Aug	28	Dec	14.83
Stockton (2)	62.8	105	Aug	30	Dec	18.88
Summit	44.9	95	July	8	Dec	44.70
Suisun City	60.3	105	July	32	Dec	23.14
Susanville		94	June	10	Dec	
Tehachapi (1)	56.2	99	Aug	19	Dec	
Tehama	65.1	106	Aug	32	Dec	46.26
Templeton	58.7	108	Aug	23	Dec	17.46
Towles	54.4	92	July	22	Nov	71.70
Tracy	63.8	105	May	30	Dec	12.25
Traver	62.4	112	Aug	26	Dec	8.77
Tropico	61.7	94	May	36	Nov	15.57
Truckee	43.7	94	Aug	—9	Nov	31.10
Tulare (1)	64.7	107	May	28	Dec	6.66
Turlock (1)	64.1	106	July	30	Dec	10.45
Turlock (2)				24	Dec	11.88
Upper Mattole						84.27
Vacaville (1)	61.5	110	Aug	33	Dec	29.18
Vacaville (2)	63.0	115	Aug	34	Dec	22.35
Valley Springs	62.5	103	Aug	30	Dec	25.02
Ventura						17.02
Vina	63.2	108	Aug	34	Dec	21.27
Volcano Springs	78.2	124	June	29	Dec	
Walnut Creek	59.4	107	Aug	30	Dec	22.82
Westley	65.7	107	Aug	31	Nov	13.42
Wheatland	60.8	109	Aug	31	Feb	26.32
Whittier	66.5	106	May	38	Jan	11.58
Williams	64.1	108	Aug	30	Feb	10.49
Willows (1)	60.3	106	July	27	Nov	23.92
Willows (2)	62.8	105	Aug	32	Dec	27.19
Winchester		110	Aug	24	Dec	
Winters	66.7	108	Aug	30	Dec	24.98
Woodland	59.8	104	July	26	Jan	22.56
Yreka		96	June	18	Jan	
Yuba City	64.5	102	July	32	Dec	28.88
Colorado.						
Alma	33.1	78	Aug	—21	Dec	10.43
Box Elder						13.37
Brush						16.82
Cheyenne Wells		104	June	—11	Jan	
Climax	28.2	72	July	—30	Jan	37.10
Como (near)	35.7	80	June	—11	Jan	10.48
Cope	49.8	99	July	—19	Jan	28.36
Cumbres	33.3	81	June	—25	Dec	25.95
Delta	47.4	104	Aug	—17	Jan	5.84
Dillon						29.95
Downing	45.7	100	Aug	—19	Jan	14.35
Fort Collins	45.4	99	Aug	—28	Jan	15.45
Fort Collins (near)						11.88
Gaynor						15.63
Georgetown	42.9	88	June	—5	Jan	15.14
Glen Eyrie	47.1	91	June	—9	Jan	
Gold Hill						24.55
Greenhorn	46.7	95	Aug	—11	Mar	22.11
Grover	45.1	97	Aug	—20	Jan	10.21
Husted	46.6	99	Aug	—20	Jan	16.75
Julesburg	46.7	103	Aug	—32	Jan	19.80
Lamar	53.1	108	Aug	—14	Mar	12.28
La Porte						14.86
Las Animas	50.4	102	July	—12	Mar	7.32
Le Roy	46.6	100	July	—18	Jan	20.11
Loveland						15.08
Middle Box Elder						13.63
Moraine	40.9	85	Aug	—17	Jan	13.48
Pagoda (near)	41.2	95	Aug	—27	Jan	18.25
Parachute	48.3	98	June	—14	Jan	7.01
Robb	49.8	106	June	—19	Jan	21.30
Rocky Ford	51.0	104	Aug	—14	Dec	17.10
San Luis	40.8	91	July	—24	Dec	11.04
Surface Creek	48.0	98	June	—9	Jan	11.54
Table Rock	42.1	90	June	—21	Jan	19.59
T. S. Ranch	48.3	99	Aug	—6	Jan	17.79
Thon	47.9	104	Aug	—19	Jan	12.74
Ward District						23.51
Yuma						18.92
Connecticut.						
Canton	47.8	97	June	—4	Jan	44.99
Colchester	48.2	96	July	—1	Jan	
Falls Village						44.59
Hartford (2)						39.10
Lebanon						35.67
New Hartford (1)	42.3	96	June	—9	Jan	44.71
New Hartford (2)						43.18
North Grosvenor Dale	46.6	98	June	0	Jan	40.38
Norwalk (2)	47.5	94	June	—2	Jan	
Southington	47.9	94	June	1	Jan	36.22
South Manchester						37.04
Thompson		89	June	—3	Jan	
Voluntown	47.8	93	July	0	Jan	39.27
Wallingford						37.88
Waterbury	47.8	93	June	—7	Jan	40.44
West Simsbury						41.20

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
<i>Delaware.</i>						
Dover	53.7	100	July	8	Jan	43.36
Kirkwood	53.0	102	July			
Seaford	53.9	100	July	7	Jan	40.65
<i>District of Columbia.</i>						
Distributing Reservoir	54.1	97	July	4	Feb	46.10
Long Bridge						40.47
Receiving Reservoir	53.8	94	July	5	Feb	43.52
West Washington	55.9	102	July	4	Jan	42.78
<i>Florida.</i>						
Amelia	66.9	91	June	30	Jan	47.82
Archer		97	May	22	Jan	
Brooksville	68.9	93	May	30	Mar	49.87
Eustis	69.2	99	July	30	Jan	41.52
Federal Point		94	July	30	Dec	
Fort Meade	69.7	98	Aug	22	Jan	46.10
Green Cove Springs	68.1	95	June	25	Jan	52.79
Homeland	69.6	95	July	26	Jan	44.15
Hypoluxo	73.2	97	July	42	Dec	68.50
Manatee		98	June	34	Jan	
Merritts Island	71.6	90	May	36	Dec	34.84
Myers	70.6	90	May	37	Jan	61.11
Ocala	68.7	93	July	26	Dec	58.53
Saint Francis Barracks	68.2	94	July	29	Jan	39.93
Saint Petersburg	71.0	95	July	35	Jan	46.79
Tallahassee		93	July	25	Dec	
Tarpon Springs	70.0	92	July	33	Mar	49.80
<i>Georgia.</i>						
Americus	65.7	100	June	18	Dec	52.30
Athens (1)		94	July	18	Dec	
Athens (2)	60.5	97	June	15	Dec	54.54
Blakely		96	June	22	Dec	
Canton						63.96
Cordele		102	June	16	Dec	
Diamond	55.7	94	June	9	Jan	62.63
Elberton				10	Dec	52.30
Forsyth	65.3	96	June	24	Dec	60.89
Fort Gaines	65.2	95	June	20	Jan	49.09
Gillsville	61.1	92	July	23	Jan	56.10
Hephzibah	63.4	92	July	28	Jan	48.10
Louisville	63.9	101	July	20	Dec	43.90
Marietta	63.2	92	July	13	Dec	60.32
Milledgeville	62.5	94	June	19	Dec	48.40
Millen	63.9	100	July	17	Jan	54.12
Piscola				26	Jan	48.28
Point Peter	60.4	96	Aug	18	Dec	48.05
Poulan	64.3	97	June	20	Dec	47.33
Quitman	67.9	100	June	24	Jan	44.42
Resaca						63.90
Rome		95	June	22	Dec	68.56
Thomasville	65.9	98	June	24	Dec	51.36
Toccoa	59.7	96	July	17	Jan	67.41
Union Point		94	May			25.487
Waynesboro		102	July			45.67
<i>Idaho.</i>						
American Falls	44.0	99	July	-21	Jan	11.38
Boise Barracks	49.3	109	July	1	Jan	11.75
Fort Sherman				-16	Jan	27.01
Garden Valley	46.4	98	June	-6	Jan	21.38
Henry's Lake	36.0	90	July	-25	Jan	16.02
Ruthburg		101	July	6	Jan	
<i>Illinois.</i>						
Alton						42.50
Aurora (1)	55.5	94	July	-16	Dec	44.45
Aurora (2)				-14	Jan	47.96
Beardstown						37.33
Carlinville	52.1	99	Aug	-17	Jan	48.83
Chester						43.55
Collinsville		94	June	-11	Jan	
Dixon	46.2	97	July	-16	Jan	39.56
East Peoria	50.5	98	July	-12	Jan	
Ellsworth	50.2	97	July	-16	Jan	42.68
Fairmount	51.5	100	June	-14	Jan	37.02
Fort Sheridan		94	July	-8	Dec	33.68
Golconda		92	July	-2	Jan	
Greenville	52.0	100	July	-13	Jan	46.36
Griggsville		97	July	-9	Dec	42.09
Hennepin		100	July	-14	Jan	41.78
Jordans Grove	54.6	96	July	-8	Jan	45.78
Louisville	51.7	98	July	-12	Jan	39.70
McLeansboro		107	July	-10	Jan	
Martinsville		96	July	-16	Jan	
Mascoutah		99	July	-15	Jan	
Mattoon	53.5	100	July			43.83
Mount Carmel						37.40
Olney (1)	55.0	99	July	-7	Jan	40.21
Olney (2)	51.0	103	July	-11	Jan	36.01
Oswego	45.5	96	July	-16	Jan	41.02
Ottawa	49.1	98	July	-15	Jan	45.87
Palestine	51.9	97	July	-14	Jan	41.91
Pana	53.1	100	July	-6	Dec	63.32
Peoria (1)						39.45
Peoria (2)	51.7	98	July	-6	Jan	35.66
Philo	49.9	97	July	-25	Jan	41.41
Rantoul	49.3	104	July	-15	Dec	36.81
Riley	44.8	91	July	-13	Dec	43.21
Rockford	45.7	94	July	-17	Jan	54.79
Rushville	51.6	98	July	-8	Dec	41.97
Shawneetown						31.11
Sycamore	45.7	93	July	-12	Jan	45.64
Walnut		99	July	-13	Jan	41.60
White Hall	50.1	92	July	-5	Jan	41.41

Annual summary for 1892—Voluntary stations—Continued.

State and station.		Temperature—degrees Fahrenheit.				Precipitation in inches and hundredths.
		Mean for 1892.	Extremes for 1892.			
			Max.	Month.	Min.		Month.
Illinois—Continued.						
Winnebago	45.0	93	July	-14	Jan	45.07
Indiana.						
Angola	49.1	100	July	-7	Jan	40.42
Butlerville	52.2	100	July	-8	Jan	43.55
Columbia City	49.0	94	July	-16	Jan	41.07
Columbus	52.1	97	July	-14	Jan	36.81
Connersville	51.1	95	July	-15	Jan	37.80
Degonia Springs	55.3	95	July	-5	Jan	46.64
Evansville	55.3	95	July	-15	Jan	38.29
Farmland	50.6	98	July	-14	Jan	42.85
Huntington	55.0	97	July	-2	Jan	44.05
Jeffersonville	50.3	96	July	-20	Jan	37.30
Lafayette	51.0	95	July	-12	Jan	43.48
Logansport (1)	51.0	95	July	-12	Jan	44.15
Logansport (2)	55.6	99	July	-7	Jan	36.84
Marengo	49.6	101	July	-22	Jan	53.90
Marion	49.6	95	July	-13	Jan	54.88
Mauzy	50.4	99	July	-18	Jan	38.16
Mount Vernon (1)	53.9	99	July	-8	Jan	36.94
Point Isabel	51.3	96	July	-12	Jan	50.04
Princeton	53.5	98	July	-8	Jan	37.99
Rockville	53.5	98	July	-8	Jan	42.63
Rushville	54.1	100	July	-4	Jan	38.04
Seymour	54.1	100	July	-4	Jan	40.07
Terre Haute	52.2	94	July	-14	Jan	39.32
Vevay	52.2	94	July	-14	Jan	37.21
Vincennes	55.9	104	Aug	-13	Jan	37.07
Worthington	61.7	106	July	-8	Jan	40.34
Indian Territory.						
Eufaula	63.9	100	July	-1	Jan	50.31
Fort Supply	63.9	100	July	-1	Jan	21.99
Healdton	61.7	106	July	-8	Jan	47.86
Purcell	63.9	100	July	-1	Jan	40.03
South McAlester	63.9	100	July	-1	Jan	65.41
Tulsa	63.9	100	July	-1	Jan	46.16
Iowa.						
Alta (1)	43.7	95	June	-28	Jan	32.00
Amana	46.2	93	June	-21	Jan	42.41
Ames (2)	46.0	103	July	-38	Jan	27.93
Atlantic	45.7	96	July	-25	Jan	31.38
Belle Plaine	45.7	96	July	-25	Jan	31.38
Blakeville	48.1	98	Aug	-30	Jan	36.26
Blockton	48.1	98	Aug	-30	Jan	36.26
Carroll	48.1	98	Aug	-30	Jan	36.26
Cedar Falls	48.1	98	Aug	-30	Jan	36.26
Cedar Rapids	48.1	98	Aug	-30	Jan	36.26
Charles City	43.4	92	July	-26	Jan	29.15
Clarinda	49.8	100	July	-26	Jan	34.61
Clinton	46.7	96	July	-17	Dec	40.64
Corning (2)	47.9	95	Aug	-31	Jan	35.58
Corydon	47.9	95	Aug	-31	Jan	35.58
Cresco	42.4	90	July	-26	Jan	36.33
Delaware	43.0	94	July	-22	Jan	41.00
Fayette	44.5	95	July	-26	Jan	40.61
Fort Madison	52.7	96	Aug	-15	Jan	39.63
Glenwood	44.0	91	June	-22	Jan	45.69
Grand Meadow	44.0	91	June	-22	Jan	45.69
Greenfield	45.9	95	July	-27	Jan	34.34
Grinnell	46.6	92	July	-24	Jan	33.26
Grundy Center	45.0	92	July	-24	Jan	35.07
Hampton	42.9	93	July	-27	Jan	34.10
Hawk Eye	42.9	93	July	-27	Jan	34.10
Hopeville	47.3	93	Aug	-28	Jan	35.60
Hopkinton	47.3	93	Aug	-28	Jan	38.13
Independence	44.7	94	July	-20	Dec	33.74
Indianola	48.0	94	Aug	-28	Jan	32.88
Iowa City	47.3	96	July	-22	Jan	42.78
Keosauqua	50.3	97	Aug	-18	Jan	39.57
Larrabee	44.4	99	July	-32	Jan	32.88
Le Claire	44.4	99	July	-32	Jan	32.88
Logan	50.0	100	July	-29	Jan	38.72
Maquoketa	46.0	96	July	-20	Jan	35.25
Mason City	46.0	96	July	-20	Jan	44.66
Maxon	48.6	102	July	-30	Jan	39.46
Mechanicsville	45.8	92	June	-22	Jan	42.69
Monticello	45.1	95	July	-21	Jan	38.09
Mount Pleasant (1)	47.0	91	Aug	-21	Jan	33.89
Murray	47.7	94	July	-26	Jan	42.77
Muscatine	48.0	96	Aug	-15	Jan	42.30
Oskaloosa	48.0	96	Aug	-15	Jan	42.30
Panama	46.8	98	July	-29	Jan	38.22
Richland	45.0	95	July	-26	Jan	44.17
Storm Lake	45.9	98	July	-28	Jan	25.07
Vinton	45.3	91	Aug	-24	Jan	33.13
Washington	50.4	101	July	-19	Jan	35.36
Webster City	45.0	96	July	-38	Jan	34.89
Williams	45.0	96	July	-38	Jan	34.89
Winterset	47.6	100	July	-24	Jan	38.88
Kansas.						
Abilene	54.1	101	July	-19	Jan	37.19
Allison	47.7	100	July	-18	Jan	30.81
Altamora	52.0	100	Aug	-13	Jan	22.43
Atchison	52.5	100	July	-23	Jan	45.64
Bucklin	52.5	100	July	-23	Jan	33.79
Burr Oak	52.5	100	July	-23	Jan	33.79
Cawker City	51.6	102	July	-20	Jan	19.85
Coldwater	54.5	107	July	-13	Jan	26.11
Collyer	51.6	106	July	-10	Jan	21.65
Columbus	55.3	100	Aug	-16	Jan	20.63
Cunningham	52.1	107	July	-15	Jan	49.92
Downs	52.1	107	July	-15	Jan	23.28

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State and station.	Temperature—degrees Fahrenheit.				Precipitation in inches and hundredths.	
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.		Month.
Kansas—Continued.						
Elco	53.9	100	June	-22	Jan.	33.20
Elk Falls	53.9	100	June	-22	Jan.	35.24
Emporia	54.1	99	Aug.	-13	Jan.	19.06
Englewood	55.2	105	July	-13	Dec.	21.30
Eureka Ranch	51.1	107	July	-19	Jan.	33.64
Fort Riley	53.3	104	July	-25	Jan.	23.64
Gibson	50.7	108	July	-18	Jan.	25.00
Gove City	50.6	108	July	-11	Jan.	35.05
Grainfield	50.6	104	July	-12	Jan.	34.87
Grenola	56.0	104	Aug.	-15	Jan.	32.26
Grinnell	50.8	107	July	-12	Jan.	27.56
Havensville	50.8	99	Aug.	-24	Jan.	46.33
Horton	50.6	100	July	-33	Jan.	42.88
Hutchinson	55.2	102	Aug.	-13	Jan.	47.92
Independence	52.6	106	Aug.	-16	Jan.	25.04
Kansas City	52.6	102	Aug.	-19	Jan.	31.49
Kellogg	50.7	107	Aug.	-20	Jan.	9.53
Kiowa	56.6	105	July	-11	Jan.	42.33
Kirwin	50.7	104	Aug.	-18	Jan.	39.89
La Crosse	52.9	111	Aug.	-16	Jan.	14.50
Lakin	52.4	98	Aug.	-19	Jan.	30.22
Lawrence	53.7	101	June	-20	Jan.	31.21
Lebo	50.8	107	Aug.	-14	Jan.	30.46
Leoti	53.2	104	Aug.	-18	Jan.	43.47
McPherson	51.7	106	July	-26	Jan.	31.67
Manhattan (1)	51.7	106	July	-26	Jan.	43.47
Manhattan (2)	51.7	106	July	-26	Jan.	31.67
Manhattan (3)	51.7	106	July	-26	Jan.	43.47
Marmaton	51.8	102	Aug.	-20	Jan.	31.67
Minneapolis	51.8	100	July	-20	Jan.	43.47
Monument	51.8	102	Aug.	-20	Jan.	31.67
Morse	51.2	106	July	-24	Jan.	43.47
Morton	51.2	98	Aug.	-21	Jan.	43.41
Oberlin	54.6	104	Aug.	-12	Jan.	14.25
Oswego	50.8	108	Aug.	-18	Jan.	24.28
Page City	50.8	108	Aug.	-18	Jan.	24.28
Phillipsburg	50.8	108	Aug.	-18	Jan.	24.28
Pleasant Dale	50.8	108	Aug.	-18	Jan.	24.28
Rome	55.0	103	Aug.	-14	Jan.	26.68
Salina	52.8	98	July	-15	Jan.	40.22
Sedan	55.8	102	Aug.	-16	Jan.	40.22
Sharon Springs	50.8	106	Aug.	-8	Jan.	40.22
Shields	50.9	103	July	-10	Jan.	14.18
Tribune	50.9	107	Aug.	-10	Jan.	13.11
Ulysses	53.8	109	Aug.	-5	Jan.	13.11
Wa Keeney	50.8	102	July	-10	Jan.	13.11
Wakefield	54.1	108	July	-20	Jan.	32.59
Wallace (1)	50.8	106	July	-11	Jan.	17.65
Wallace (2)	50.8	106	July	-11	Jan.	17.65
Yates Center	50.8	106	July	-11	Jan.	48.68
Kentucky.						
Bowling Green	52.6	7	Jan.	52.6	Jan.	
Caddo	56.5	98	June	5	Dec.	45.67
Canton	56.5	98	June	5	Dec.	42.51
Cattlettsburg	52.1	98	July	-3	Jan.	45.43
Earlington	52.1	98	July	-3	Jan.	40.06
Falmouth	52.1	98	July	-3	Jan.	32.12
Frankfort	57.0	97	July	6	Jan.	59.51
Franklin	57.0	97	July	6	Jan.	44.86
Greensburg	53.7	99	July	-1	Dec.	49.36
Harrodsburg	53.7	99	July	-1	Dec.	36.34
Louisville	54.7	100	July	6	Jan.	51.57
Middlesboro	54.7	94	July	6	Jan.	32.78
Paducah (1)	53.5	98	July	-6	Jan.	36.53
Pellville	53.5	98	July	-6	Jan.	44.63
Shelbyville	53.5	99	June	2	Jan.	42.44
South Fork	53.5	99	June	2	Jan.	42.44
Springfield	53.5	99	June	2	Jan.	42.44
Wickliffe	53.5	99	June	2	Jan.	42.44
Williamsburg (1)	53.5	95	July	-3	Dec.	56.34
Louisiana.						
Abbeville	68.7	98	Aug.	20	Dec.	72.56
Alexandria	68.7	98	Aug.	20	Dec.	62.16
Amite	68.7	98	Aug.	20	Dec.	62.16
Baton Rouge	65.8	93	June	18	Jan.	63.24
Cameron	66.4	99	Aug.	13	Dec.	66.67
Cheneyville	67.2	96	June	22	Dec.	62.74
Clinton	71.0	101	June	20	Jan.	60.96
Coushatta (1)	65.3	99	June	13	Jan.	45.12
Coushatta (2)	65.3	99	June	13	Jan.	48.97
Davis	67.4	97	June	11	Jan.	54.11
Delhi	67.4	97	June	11	Jan.	56.00
Donaldsonville	67.4	96	June	20	Dec.	60.88
Emilie	67.2	95	June	20	Dec.	44.86
Girard	67.2	95	June	20	Dec.	50.26
Grand Coteau	67.2	94	June	22	Dec.	67.96
Houma	67.3	96	June	20	Dec.	65.03
Lafayette	66.9	100	June	20	Dec.	59.22
Lake Charles	64.7	97	July	10	Jan.	57.26
Liberty Hill	64.5	102	June	11	Jan.	55.60
Macksville	65.4	98	June	18	Dec.	62.52
Maurepas	65.6	94	Aug.	22	Dec.	53.54
Melville	65.6	98	Aug.	20	Dec.	66.73
Monroe	64.7	97	June	16	Jan.	63.37
North Louisiana Experiment Station	67.2	97	June	12	Jan.	69.42
Paincourtville	67.2	95	June	20	Dec.	36.60
Shell Beach	67.2	95	June	18	Dec.	63.37
Sugar Experiment Station	68.3	99	June	21	Dec.	69.42
Winnabow	63.6	98	June	9	Jan.	36.60
Maine.						
Belfast	44.5	89	June	-6	Dec.	36.60

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.				Precipitation in inches and hundredths.	
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.		Month.
Maine—Continued.						
Calais	44.1	89	June	-6	Dec.	45.27
Cornish	44.3	94	Aug.	-7	Dec.	47.23
East Machias	42.5	89	June	-7	Dec.	37.74
Fairfield		93	June	-15	Jan.	40.83
Farmington	43.6	98	June	-17	Dec.	
Houlton		91	July			
Kennebec Arsenal	43.7	93	June	-13	Feb.	33.53
Lewiston	44.1	92	June	-9	Feb.	46.66
Orono	43.9	91	June	-8	Dec.	39.09
West Jonesport		90	July	-7	Dec.	
Maryland.						
Barren Creek Springs	53.9	97	July	9	Feb.	39.47
Boettcherville	52.3	100	July	-8	Feb.	35.85
Cumberland (1)	51.9	97	July	-2	Feb.	34.66
Cumberland (2)	55.1	101	July	3	Feb.	32.59
Darlington	51.0	98	July	7	Jan.	36.68
Easton	54.5	100	July	10	Jan.	38.74
Fallston	51.2	98	July	10	Dec.	48.64
Frederick	53.4	99	July	-1	Feb.	37.66
Great Falls	53.6	96	July	4	Feb.	35.12
McDonogh	52.5	95	July	8	Jan.	35.09
Mount Saint Marys	52.0			8	Jan.	44.71
New Market	51.4	98	June	7	Jan.	41.93
Solomons	55.0	98	July	10	Jan.	40.44
Taneytown						40.56
Massachusetts.						
Adams (1)	47.0	91	June	-5	Jan.	
Amherst	47.3	92	June	-8	Jan.	37.20
Amherst Experiment Station (1)	46.7	94	June	-10	Jan.	36.58
Amherst Experiment Station (2)		95	June	-10	Jan.	
Andover		94	July	-2	Jan.	
Blue Hill (summit)	46.7	92	July	-3	Dec.	39.73
Blue Hill (valley)	47.2	95	July	0	Feb.	39.92
Boston						35.45
Cambridge (1)	49.0	96	July	-4	Dec.	36.51
Cambridge (2)		94	July	0	Dec.	
Chestnut Hill	48.7	95	Aug.	0	Dec.	42.27
Clinton						30.55
Concord (1)	46.8	95	July	-6	Jan.	38.68
Dudley	46.6	95	July	-4	Jan.	
Egg Rock	46.9	89	July	0	Dec.	
Fall River	49.6	93	July	3	Jan.	44.66
Fiskdale						36.56
Fitchburg (1)	46.4	92	July	-2	Jan.	41.63
Fitchburg (2)	46.6	95	July	-4	Jan.	35.35
Framingham	48.5	96	June	-3	Jan.	41.90
Gilbertville	46.0	94	July	-8	Jan.	44.97
Groton (1)	47.6	94	June	-4	Jan.	37.85
Groton (2)	51.9	98	July	2	Dec.	39.98
Hyannis		93	Aug.	0	Feb.	
Kendall Green	47.7	97	July	-8	Jan.	39.04
Lake Cochituate	48.3	102	July	-2	Dec.	34.90
Lawrence	44.9	92	July	-6	Jan.	34.39
Leicester						40.17
Leominster	48.8	92	July	-3	Jan.	45.13
Long Plain	47.6	94	July	-4	Jan.	39.22
Lowell (1)	47.3	95	June	-6	Jan.	
Lowell (2)	47.3	95	June	-6	Jan.	
Lowell (3)	47.7	97	June	-2	Jan.	
Ludlow	44.2	91	July	-10	Feb.	45.56
Lynn (1)		94	July	1	Dec.	
Mansfield	47.4	99	July	0	Dec.	40.15
Middleboro		93	July	0	Jan.	38.92
Milton	47.2	95	June	-2	Jan.	38.28
Monroe	43.1	92	July	-9	Jan.	50.25
Monson	47.3	94	June	-9	Jan.	40.29
Mount Nonotuck						36.21
Mystic Lake						40.83
Mystic Station						38.85
New Bedford (1)	47.4	90	July	-5	Jan.	42.91
New Bedford (2)	48.6	92	July	0	Jan.	43.31
North Billerica	49.3	100	July	0	Jan.	40.53
Plymouth		94	July	4	Jan.	39.51
Provincetown	49.4	95	July	2	Dec.	33.88
Randolph						36.29
Roberts Dam						38.80
Roxbury	48.8	93	July	1	Dec.	41.26
Salem (2)						42.33
Somerset	50.9	102	July	0	Jan.	37.43
Springfield	48.5	95	June	-2	Jan.	45.29
Taunton (1)	48.6	99	July	1	Jan.	39.92
Taunton (2)		97	July	1	Jan.	
Taunton (3)	48.2	96	July	-1	Jan.	43.48
Taunton (4)	48.2	102	July	0	Jan.	37.51
Wakefield	47.9	95	June	-1	Feb.	40.18
Wellesley		94	July	-2	Jan.	
Westboro	48.5	97	July	-4	Jan.	38.77
Williamstown		92	July	-8	Jan.	
Michigan.						
Adrian	47.1	99	July	-26	Jan.	51.89
Allegan	47.2	96	July	-9	Dec.	41.23
Alma	44.8	95	July	-16	Jan.	36.21
Ann Arbor	46.3	94	July	-8	Jan.	29.93
Arbela						33.35
Ball Mountain	45.0	94	July	-11	Jan.	34.33
Bear Lake	43.3	92	July	-19	Feb.	34.79
Bellaire		98	July	-18	Feb.	
Benton Harbor	48.7	95	Aug.	-5	Feb.	43.20
Berlin	45.7	101	July	-13	Feb.	32.65
Berrien Springs (1)	49.7	98	July	3	Jan.	53.92
Birch Run	45.6	94	July	-22	Jan.	30.04
Birmingham	46.5	96	June	-20	Jan.	35.31

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
Michigan—Continued.						
Bronson	46.9	96	July	-22	Jan	32.18
Caldwell	94	July	-14	Mar		
Calumet	38.9	92	July	-14	Dec	27.96
Charlevoix	94	July	-7	Feb		
Clinton	46.6	97	July	-25	Jan	38.24
Crystal Falls	37.9	95	June	-25	Jan	
Fairview	45.2	95	July	-3	Dec	30.78
Fitchburg	96	July	-23	Jan		
Flint	44.9	97	July	-24	Jan	25.67
Fremont	94	July	-18	Jan		29.48
Grape	48.4	95	July	-18	Jan	36.82
Hanover	47.6	94	July	-16	Jan	39.19
Harbor Springs	42.3	94	July	-14	Feb	38.03
Harrisville	40.9	91	June	-18	Feb	39.13
Hart	44.8	90	Aug	2	Jan	38.55
Highland Station	97	July	-19	Jan		32.00
Hillsdale	46.7	95	July	-16	Jan	36.15
Howell	45.4	96	July	-23	Jan	30.42
Ivan	42.6	98	July	-11	Jan	36.30
Jeddo	44.4	94	July	-9	Jan	30.26
Kalamazoo	48.2	94	July	-1	Jan	33.33
Lansing	46.0	95	July	-12	Jan	32.06
McMillan	87	July	-24	Jan		42.87
Madison	46.7	96	July	-13	Jan	36.71
Marshall	46.5	87	July	-6	Dec	31.39
Mayville	45.2	94	July	-22	Jan	34.05
Mottville	47.6	97	Aug	0	Jan	38.16
Noble	46.9	86	July	-13	Jan	31.55
North Marshall	93	July	-14	Jan		38.02
Ovid	45.3	95	July	-20	Jan	
Rawsonville	47.8	96	July	-16	Feb	30.11
Rockland	40.0	98	June	-7	Jan	34.34
Saint Ignace	39.9	87	Aug	-20	Jan	31.60
Sand Beach	96	July	-9	Jan		38.58
Thornville	47.1	96	July	-20	Jan	
Vandalia	47.6	93	July	-20	Jan	37.63
Washington	98	July	-22	Jan		34.80
Weldon Creek	98	July	-8	Jan		41.85
White Pigeon	45.1	93	July			
Ypsilanti	97	July				
Minnesota.						
Alexandria	42.2	89	June	-31	Dec	21.65
Alma City	48.2	95	July	-44	Jan	28.72
Crookston	43.0	96	July	-30	Jan	34.76
Farmington	91	Aug.				26.61
Fergus Falls	42.7	99	Sept	-32	Jan	22.93
Fort Ripley	36.9	88	July	-42	Jan	20.98
Granite Falls	36.8	91	July	-42	Jan	23.20
Lake Winnibigoshish	42.2	93	June	-29	Jan	37.90
Leech Lake	42.0	97	Sept	-35	Jan	26.86
Minneapolis	40.9	93	July	-35	Jan	25.62
Montevideo	42.4	89	June	-29	Jan	39.62
Morris	36.8	87	July	-42	Jan	23.49
Northfield	41.6	90	July	-30	Jan	30.42
Ortonville	41.6	92	June	-30	Jan	30.01
Pine River	42.4		-29	Jan		32.58
Redwood Falls	62.5	96	June	13	Dec	59.88
Rolling Green	61.8	96	June	8	Jan	43.17
Saint Charles	64.2	99	June	10	Jan	69.74
Sheldon	63.2	92	June	17	Jan	54.78
Mississippi.						
Agricultural College	64.9	98	June	14	Jan	60.79
Batesville	63.0	93	June	14	Dec	58.65
Brookhaven	65.2	95	June	16	Jan	52.00
Canton	62.8	94	June	14	Jan	56.94
Columbus (1)	61.9	98	Aug	16	Jan	57.80
Edwards	61.9	93	June	13	Jan	50.50
Enterprise	61.7	98	June	9	Jan	56.83
Fayette	65.8	96	June	17	Dec	47.96
Greenville (1)	60.5	100	June			60.46
Hattiesburg	63.8	98	June	8	Jan	67.76
Kosciusko	69.4	96	June	22	Dec	66.36
Louisville	62.5	103	June	10	Jan	63.47
Natchez	61.2	102	June	10	Jan	57.08
Okolona	62.4					62.84
Pontotoc	60.5	95	June			
Port Gibson	63.8	98	June			
Ship Island	69.4	96	June			
Vaiden	62.5	103	June			
Water Valley	61.2	102	June			
Yazoo City	62.4					
Missouri.						
Boonville	52.6	94	July	-21	Jan	59.51
Brunswick	52.2	95	Aug	-15	Jan	39.75
Cape Girardeau	51.5	98	July	-25	Jan	31.88
Carrollton	53.3	98	Aug	-20	Jan	44.75
Conception	52.9	98	July	-11	Jan	33.95
Darksville	53.9	100	Aug	-15	Jan	40.02
East Lynne	52.9	98	July	-11	Jan	48.95
Eldon	53.9	94	June	-3	Jan	49.86
Fayette	52.1	96	Aug	-20	Jan	48.31
Fox Creek	56.3	92	July	-12	Jan	41.35
Glasgow	54.6	98	Aug	-10	Jan	47.16
Gordonville	54.6	98	July	-10	Jan	42.61
Hermann	54.6	98	July	-10	Jan	48.45
Jefferson City	54.6	98	July	-10	Jan	43.97
Jerome	53.9	95	Aug	-10	Dec	46.82
Lamonte	53.9	100	June	-18	Jan	47.91
Lebanon	53.9	100	June	-18	Jan	39.13
Liberty	53.9	100	June	-18	Jan	38.29
Louisiana Bridge	53.9	100	June	-18	Jan	38.29

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
Missouri—Continued.						
Marble Hill	55.2	90	Sept	-10	Jan	
Mexico	52.6	98	June	-11	Jan	49.17
Mine La Motte	55.5	92	Aug	-18	Jan	42.94
New Haven	53.5	100	June	-8	Jan	44.45
Oregon (1)	51.3	97	July	-26	Jan	31.59
Oregon (2)	50.5	98	July	-25	Jan	29.15
Phillipsburg		95	June			47.75
Pickering		101	July	-31	Jan	
Platte River	48.4	99	July	-22	Jan	36.78
Princeton	50.7	100	July	-25	Jan	46.44
Rolla						50.35
Saint Joseph						33.57
Saint Louis (1)	52.9	96	Aug	-21	Jan	38.49
Sedalia		98	July	-19	Jan	53.55
Shelbina						39.14
Stellada	54.3	98	Aug	-16	Jan	47.67
Warrensburg	53.3	96	Aug	-13	Jan	48.21
Warrenton	53.4	99	Aug	-6	Dec	46.59
Montana.						
Boulder Valley		92	July	-27	Jan	
Camp Poplar River	39.0	104	Aug	-42	Jan	13.30
Fort Keogh	43.2	108	Aug	-28	Jan	12.64
Fort Missoula	42.9	100	Aug	-15	Jan	13.13
Glendive	44.6	113	Aug	-43	Jan	17.75
Great Falls	48.0	106	Aug	-27	Dec	17.34
Martinsdale	43.6	95	Aug	-26	Dec	16.89
Virginia City	41.2	92	July	-18	Jan	13.02
Nebraska.						
Ansley		105	July	-42	Jan	
Bassett	46.2	100	July	-30	Jan	24.46
Beatrice	48.6	101	July	-28	Jan	26.77
Creighton	43.9	103	July	-32	Jan	19.15
Crete	48.7	102	July	-32	Jan	30.78
Culbertson (1)						23.00
David City	46.3	98	July	-30	Jan	30.25
De Soto	48.4	101	July	-33	Jan	29.01
Dunning	48.0	99	July	-16	Jan	
Ericson	46.8	101	July	-25	Jan	20.09
Fort Robinson		98	July	-28	Jan	32.34
Fort Sidney	46.6	103	July	-29	Jan	19.89
Franklin		103	June	-22	Jan	21.59
Fremont	48.3	100	July	-31	Jan	24.36
Genoa	47.1	99	July	-35	Jan	26.71
Gering		101	Aug	-24	Jan	20.51
Hartington	45.2	101	July	-26	Jan	23.17
Harvard		104	July	-26	Jan	
Hebron	49.8	98	July	-28	Jan	28.17
Holdrege	48.2			-21	Jan	21.34
Imperial	49.0	105	July	-25	Jan	
Kennedy	45.5	95	July	-22	Jan	27.52
Kimball	46.8	104	Aug	-27	Jan	21.45
Lexington	48.5	113	Aug	-33	Jan	25.91
Lincoln	49.5	102	July	-29	Jan	29.91
Marquette						24.82
Minden	47.6	103	July	-24	Jan	30.42
Norfolk	46.2	98	Aug	-30	Jan	19.56
North Loup	47.6	103	July	-39	Jan	22.56
Oakdale	45.2	102	July	-40	Jan	18.16
O'Neill	46.2	102	July	-22	Jan	20.98
Ough						18.52
Palmer	45.8	104	July	-28	Jan	22.25
Plattsmouth						42.89
Ravenna		101	July	-38	Jan	25.60
Springview	46.4	107	July	-20	Jan	26.91
Syracuse	50.1	102	July	-26	Jan	27.21
Tekamah	47.5	102	July	-36	Jan	34.20
Weeping Water	47.0	105	July	-30	Jan	32.29
West Point		102	July	-34	Jan	27.06
Wilcox (1)						27.74
York		104	July			24.84
Nevada.						
Austin	46.1	90	June	3	Dec	10.43
Battle Mountain	51.7	99	Aug	3	Jan	11.77
Belleville		115	July	10	Feb	
Belmont	45.2	90	June	-1	Dec	7.69
Beowawe	49.3	99	July	-8	Feb	7.29
Brown	57.1	104	Aug	10	Jan	2.62
Carlin	44.1	100	June	-9	Feb	5.70
Carson City	49.0	94	Aug	-3	Feb	14.25
Cranes Ranch						12.58
Downeyville		106	June	6	Jan	5.27
Elko	45.4	98	June	-14	Jan	9.26
Ely		94	June	-22	Dec	
Fenelon	49.3	108	July	-1	Dec	4.00
Golconda	50.4	100	July	2	Jan	7.35
Halleck	42.8	102	June	-18	Jan	9.64
Hawthorne (1)	55.7	97	July	17	Jan	4.66
Hawthorne (2)	53.0	98	July	11	Feb	4.62
Hot Springs	52.9	100	Aug	0	Jan	10.47
Humboldt	51.4	95	Aug	6	Jan	3.78
Lewers Ranch	49.6	92	Aug	10	Dec	26.29
Lovelock		100	June	10	Feb	
Mill City	51.8	103	Aug	4	Jan	
Monitors Ranch	45.0	97	June	16	Feb	7.66
Palisado	48.6	98	July	-9	Jan	7.95
Palmetto	47.5	94	Aug	-1	Jan	13.75
Pioche	49.1	104	Aug	-25	Jan	7.10
Reno	53.6	95	June	11	Dec	
Reno State University	50.8	93	July	6	Feb	11.92
Saint Clair	50.9	94	June	6	Dec	5.05
South Camp	47.0	91	Aug	6	Dec	16.70

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	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
Nevada—Continued.						
Stofiel	47.0	100	June	-25	Jan	7.61
Sunnyside	47.0	105	June	-15	Dec	5.34
Tecoma	47.0	98	Aug	-4	Jan	7.46
Toano	48.3	98	June	-10	Jan	6.67
Tybo	49.4	96	June	-1	Feb	18.33
Verdi	47.9	96	June	0	Feb	7.84
Wabuska	55.5	100	July	0	Feb	7.70
Wadsworth	49.3	100	July	1	Dec	7.70
Wells	44.8	96	July	-10	Jan	7.70
Winnemucca	50.4	94	July	8	Jan	7.70
New Hampshire.						
Belmont	40.5	94	June	-24	Feb	43.07
Berlin Mills	45.4	93	June	-8	Jan	41.96
Concord (1)	44.4	92	July	-10	Dec	37.82
Groveton	40.9	90	June	-18	Jan	38.11
Hanover (1)	44.0	89	June	-11	Feb	35.72
Lakeport	46.6	96	June	-6	Jan	41.99
Manchester	47.3	96	June	-7	Jan	36.69
Nashua	46.1	94	June	-6	Dec	36.40
Newton	43.2	96	June	-13	Feb	37.66
Peterboro	42.1	94	Aug	-17	Jan	42.69
Plymouth	44.1	96	June	-12	Feb	39.42
Stratford	44.1	96	June	-20	Feb	34.45
Walpole	44.4	94	June	-22	Feb	40.29
Wiers Bridge	44.4	94	June	-22	Feb	35.22
Wolfboro	44.4	94	June	-22	Feb	35.22
New Jersey.						
Allaire	50.3	96	July	1	Jan	43.29
Asbury Park	51.5	96	June	5	Jan	41.27
Bayonne	51.8	101	July	8	Jan	43.49
Belleville	49.1	100	July	3	Dec	41.56
Belvidere	50.8	100	July	4	Jan	44.10
Beverly	53.1	105	July	9	Jan	44.19
Camden	53.1	105	July	9	Jan	39.81
Bridgeport (1)	53.3	100	July	13	Dec	41.16
Cape May C. H.	53.3	93	July	9	Jan	39.38
Dover	48.3	97	July	-6	Jan	47.15
Egg Harbor City	51.1	100	July	4	Jan	40.61
Elizabeth	50.4	97	July	1	Jan	45.98
Franklinville	51.3	100	July	4	Jan	43.38
Freehold	51.4	95	July	4	Jan	39.35
Gillette	50.1	100	July	3	Jan	45.30
Hanover	51.0	99	July	-6	Jan	42.76
Highland Park	51.0	99	July	-1	Jan	41.81
Imlaystown	52.4	100	July	5	Jan	46.59
Junction	51.2	99	July	6	Jan	42.52
Lambertville	50.4	99	July	2	Jan	41.08
Locktown	51.0	101	July	7	Jan	40.34
Moorestown	51.0	101	July	7	Jan	36.64
Mount Holly	51.2	98	July	9	Dec	44.37
Newark (1)	51.2	98	July	6	Dec	44.09
New Brunswick (1)	52.6	105	July	1	Jan	43.66
New Brunswick (2)	50.8	97	July	1	Jan	46.49
Newton	48.0	97	July	-3	Jan	39.37
Ocean City	52.7	95	July	9	Dec	45.53
Oceanic	53.1	95	July	9	Jan	40.77
Paterson	52.5	98	June	7	Jan	10.44
Plainfield	52.5	98	July	4	Jan	13
Rancocas	53.7	101	July	7	Jan	15
Readington	53.7	96	July	6	Jan	13
Salem	53.7	96	July	10	Jan	13
Somerville	49.8	98	July	-9	Jan	13
South Orange	49.8	98	July	5	Jan	13
Tenafly	49.8	97	July	0	Jan	13
Trenton	54.9	99	July	8	Jan	13
Vineland	54.9	99	July	9	Jan	13
Whiting	52.3	102	July	1	Jan	13
New Mexico.						
Albert	103	Aug	3	Jan	Dec	10.44
Albuquerque	97	June	15	Dec	Jan	10.44
Bloomfield	103	June	-6	Jan	Dec	10.44
Chama	99	Aug	-16	Jan	Dec	10.44
Coolidge	45.1	105	July	-9	Jan	7.31
Deming	108	June	0	Jan	Dec	7.93
Embudo	106	June	-3	Jan	Dec	9.57
Estalina Springs	48.8	101	June	0	Jan	8.80
Fort Bayard	55.2	102	July	8	Jan	8.72
Fort Wingate	50.5	99	June	-2	Jan	10.29
Gallinas Spring	55.6	104	June	-3	Jan	11.63
Halls Peak	44.6	96	June	-26	Jan	7.85
Hillsboro	58.0	105	June	8	Jan	6.96
La Lun	61.6	94	June	15	Jan	4.13
Lordsburg	64.7	108	June	13	Jan	13.39
Los Lunas	105	July	3	Jan	Dec	4.31
Monero	43.2	94	Aug	-17	Jan	13.93
Olie	50.3	101	July	-4	Jan	9.53
Socorro	59.6	104	June	11	Dec	54.18
Springer	99	June	-5	Dec	Jan	33.11
Taos	47.5	101	June	-14	Jan	36.31
New York.						
Adams Center	45.7	94	July	-14	Jan	36.10
Addison	43.1	92	Aug	-9	Jan	40.04
Akron	43.0	93	Aug	-23	Jan	45.90
Alfred Center	42.7	89	Aug	-18	Jan	31.44
Angelica	44.6	93	Aug	-3	Jan	47.06
Arcade	44.6	93	Aug	-3	Jan	47.06
Arkwright	44.6	93	Aug	-3	Jan	47.06
Arvon	44.6	93	Aug	-3	Jan	47.06
Baldwinsville	46.0	99	July	-17	Jan	47.06

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.				Precipitation in inches and hundredths.	
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.		Month.
New York—Continued.						
Bedford	o	o	o		Inches.	
Bethlehem Center					40.86	
Binghamton	45.6	94	July	-17	Jan	34.76
Bolivar					38.48	
Boyd's Corners	50.4	94	June	3	Jan	46.38
Brentwood	49.1	94	July	-4	Dec	45.50
Brookfield	43.3	95	June	-28	Jan	46.61
Canton	42.2	92	July	-30	Jan	48.57
Carmel		93	July	o	Jan	42.60
Central Park	51.9	97	July	9	Jan	46.09
Cherry Creek					35.60	
Cooperstown	43.3	90	July	-18	Jan	63.15
De Kalb Junction					50.55	
Demster					46.27	
Deposit					44.86	
Dunkirk (2)					32.57	
Easton					35.27	
Eden Center	47.1	98	Aug	-16	Jan	37.79
Ellis					55.91	
Factoryville	46.2	97	July	-19	Jan	39.78
Fleming	45.5	96	Aug	-5	Jan	34.26
Fort Niagara	48.4	94	July	-2	Jan	30.30
Geneva	46.6	97	July	-8	Jan	
Hess Road Station	45.9	92	June	o	Jan	36.66
Honeybrook Brook	46.2	92	July	-4	Jan	46.80
Humphrey	44.9	90	July	-8	Jan	39.53
Ithaca	47.6	95	July	-6	Jan	47.07
Jamestown	47.3	91	July	-16	Jan	40.49
Kings Station						
Le Roy	45.1	91	June	-4	Jan	40.73
Lockport	46.4	92	July	-3	Jan	45.65
Lowville	39.9	92			35.47	
Lyndonville		92	Aug	o	Jan	44.66
Lyons	39.2	92		o	Jan	28.99
Lyon Mountain				-19	Dec	32.22
Madison Barracks	41.1	87	June	-31	Jan	40.71
Malone	45.2	97	July	-20	Dec	54.16
Middletown		97	June	o	Jan	36.48
Minnewaska	43.5	93	June	-11	Jan	51.10
Mount Morris	46.1	95	Aug	-11	Jan	
Newark Valley						
New Lisbon	42.3	90	July	-21	Jan	39.65
North Hammond	42.8	94	June	-22	Jan	45.67
Number Four	40.0	88	July	-23	Jan	45.72
Oxford	43.2	88	July	-24	Jan	57.91
Palermo	44.2	95	July	-18	Jan	50.58
Perry City	43.5	94	July	-15	Jan	44.11
Plattsburg Barracks	42.7	96	June	-14	Dec	43.30
Port Jervis	47.9	94	July	-4	Jan	40.16
Poughkeepsie	47.3	98	July	-12	Jan	47.18
Quaker Street	43.2	93	July	-12	Jan	
Rome		98	July	-22	Jan	42.04
Romulus	46.3	95	July	-5	Jan	
Rondout	47.9	95	July	-3	Jan	34.09
Schockadack Depot					43.01	
Setauket		94	July	6	Jan	37.20
South Canisteo	50.0	94	July		39.41	
Southeast Reservoir	43.4	93	July	-14	Jan	40.46
South Kortright		94	July	-12	Jan	44.24
Turin		86	July	-17	Jan	36.26
Utica	45.1	93	July	-26	Jan	
Wappingers Falls					55.75	
Wedgwood	43.5	96	July	-6	Jan	46.70
West Chazy					38.58	
West Point		99	July	-2	Jan	46.79
Willetts Point	51.2	98	July	5	Jan	42.21
North Carolina.						
Asheville				4	Dec	39.65
Bryson City						41.68
Chapel Hill	58.8	105	Aug	6	Dec	54.07
Currituck Inlet					38.74	
Douglas	36.2	101	July	1	Dec	46.16
Fayetteville					42.76	
Lenoir	55.1	90	July	10	Dec	47.56
Lillington					44.10	
Littleton		100	July	7	Dec	46.07
Louisburg	57.0	94	July	3	Dec	41.83
Mount Airy	54.9	94	July	10	Jan	44.88
Mount Holly					40.42	
Mount Pleasant	57.4	96	July	6	Dec	47.27
Murphy					45.80	
Newbern	58.6	96	July	14	Dec	64.07
Oak Ridge	56.8	96	July	12	Dec	55.38
Pittsboro	56.6	95	July	-4	Dec	44.76
Salisbury	60.3	96	July	18	Dec	33.33
Saxon	56.0	99	July	5	Dec	39.96
Southern Pines	58.8	103	June	7	Dec	47.15
Weldon	57.9	96	July	2	Dec	52.26
Wilmington	57.1	97	July	3	Dec	49.36
North Dakota.						
Ashley	37.6	95	Aug	-38	Jan	47.95
Ellendale		96	Aug	-36	Jan	
Fargo	37.4	88	Aug	-35	Jan	20.92
Fort Yates	42.1	102	Aug	-31	Jan	21.20
Gallatin		98	July	-48	Jan	21.56
Grafton	35.2	94	Aug	-38	Jan	16.47
Grand Rapids	37.6	99	Aug	-39	Jan	20.83
Lakota	35.5	91	Aug	-45	Jan	
Wahpeton		100	Aug	-52	Jan	
Willow City	39.9	93	Sept	-36	Jan	
Woodbridge	34.7	105	Aug	-47	Jan	16.18

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
Ohio.						
Akron	48.8	95	July	-8	Jan	44.9
Ashland	48.4	94	July	-15	Jan	39.4
Athens	51.1	98	July	-9	Jan	34.0
Bangorville	47.9	95	July	-6	Jan	39.2
Caledonia						42.4
Canton	49.0	96	July	-18	Jan	37.8
Carrollton		96	July			38.0
Celina	52.1	95	July	-11	Jan	26.3
Circleville						33.1
Clarksville	51.0	96	July	-13	Jan	43.3
Cleveland	48.9	94	July	-9	Jan	31.4
Dayton	52.7	100	July	-15	Jan	
Elyria		99	July	-12	Jan	42.7
Findlay	48.9	97	July	-19	Jan	40.6
Fostoria	49.6	93	Aug	-11	Jan	40.5
Garrettsville	46.3	95	July	-26	Jan	38.6
Georgetown	53.2	100	July	-6	Jan	35.9
Gratiot	50.8	93	July	-14	Jan	31.3
Greenfield	50.9	96	July	-10	Jan	40.2
Greenville	49.4	91	July	-17	Jan	36.7
Hanging Rock	51.7	99	July	-1	Dec	45.3
Harbor	48.7	91	July	-12	Jan	38.7
Hiram	46.9	93	July	-6	Jan	30.3
Jacksonboro		100	July	-2	Jan	39.6
Kenton	49.7	100	July	-15	Jan	33.3
Logan	51.1	100	July	-9	Jan	36.2
Lordstown	47.3	93	July	-22	Jan	35.5
McConnellsville	51.2	96	July	-9	Jan	42.7
Mansfield						34.4
Marietta (1)				1	Jan	34.8
Marietta (2)	52.5	93	June			
Marion		99	July	-16	Jan	
Montpelier	47.3	96	July	-25	Jan	
New Alexandria	50.5	92	July	-5	Jan	37.9
New Comerstown	48.4	98	July	-21	Jan	32.9
New Holland		98	June			
North Lewisburg	51.4	99	July	-13	Jan	40.4
Oberlin	47.9	96	July	-16	Jan	41.3
Ohio State University	50.1	95	July	-18	Jan	37.1
Orangeville	47.6	96	July	-27	Jan	35.8
Pomeroy	53.7	97	June	1	Dec	25.8
Portsmouth (1)						44.3
Portsmouth (2)	53.1	101	July	4	Jan	36.6
Sidney						40.5
Tiffin	49.4	97	July	-14	Jan	36.2
Upper Sandusky	49.9	96	July	-16	Jan	44.5
Van Wert	48.5	100	July	-24	Jan	37.0
Wauseon	47.4	99	July	-23	Jan	35.9
Waverly	52.4	103	July	-5	Jan	35.9
Waynesville		103	July	-7	Jan	49.0
West Milton	48.3	98	July	-26	Jan	38.5
Weymouth						42.6
Wheeler		98	July	-20	Jan	
Wooster (1)		98	July	-20	Jan	
Youngstown	49.8	96	July	-16	Jan	30.1
Zanesville						32.6
Oklahoma.						
Burnett	58.1	100	July	-5	Jan	45.8
Fort Sill	59.2	104	July	-6	Jan	34.3
Gate City	54.0	109	Aug	-14	Jan	20.8
Guthrie	59.8	103	July	-9	Jan	37.9
Oregon.						
Albany (1)	50.9	97	June	24	Feb	37.9
Albany (2)	54.4	94	June	26	Feb	25.9
Arlington		106	June	6	Dec	
Ashland (1)	52.0	91	June	17	Dec	14.5
Aurora	53.8	102	June	27	Dec	25.7
Bandon	50.5	82	Oct	30	Jan	67.7
Brownsville	53.9	100	June	17	Dec	31.6
Comstock	51.6	100	June	20	Dec	32.8
Corvallis (2)	52.5	92	June	24	Feb	26.2
East Portland		94	June	23	Dec	25.8
Grants Pass (2)	57.7	104	June	29	Jan	20.7
Junction City	53.5	100	June	26	Feb	18.4
Lafayette	51.0	98	June	18	Dec	30.4
Leland	51.9	102	June	22	Feb	36.2
McMinnville (1)		101	June	22	Dec	
McMinnville (2)	51.9	99	June	27	Feb	33.2
Monmouth		95	June	26	Dec	21.2
Portland	51.4	92	June	22	Dec	33.2
Riddles	51.6	98	Sept	24	Jan	26.2
Roseburg	54.4	102	June	23	Dec	26.1
Salem (1)	48.3	86	June	24	Dec	28.6
Sheridan	52.9	96	June	20	Feb	26.9
Silverton	52.0	92	June	18	Dec	31.9
Siskiyou	49.0	95	Sept	20	Dec	29.0
Springfield	52.4	99	May	21	Dec	30.2
West Fork		112	June	27	Jan	
Pennsylvania.						
Aqueduct	51.4	104	July	-5	Jan	37.5
Blooming Grove	47.1	99	June	-6	Jan	52.2
Blue Knob	45.5	95	July	-12	Jan	38.2
Brookville						38.2
Browers Lock						38.7
Carlisle	49.9	102	July	3	Jan	37.5
Clarion						44.2
Coatesville	50.1	101	July	-1	Jan	45.3
Confluence						38.4
Corry	44.7	94	July	-28	Jan	54.6
Doylestown						39.9
Drifton	46.6	96	July	-1	Jan	38.9

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
Pennsylvania—Continued.						
Du Bois	43.6	94	July	-8	Jan	41.62
Dyberry	49.6	99	July	-2	Jan	40.19
Easton	46.2	90	July	-11	Jan	38.05
Edinboro	48.3	97	July	-14	Jan	40.08
Emporium	48.6	97	July	2	Dec	35.07
Freeport	50.5	103	July	2	Jan	49.32
Girardville	49.1	98	July	-8	Jan	30.17
Greensboro	46.0	92	July	-3	Jan	35.42
Hamburg	49.8	100	July	-2	Jan	40.66
Holidaysburg	49.8	98	July	-9	Jan	42.97
Honesdale	44.4	91	July	-9	Jan	41.19
Huntingdon	49.6	103	July	-4	Dec	42.15
Johnstown	50.7	102	July	0	Jan	46.23
Kane	45.9	96	July	-5	Jan	41.88
Kennett Square	45.9	97	July	-13	Dec	43.97
Kilmer	45.9	97	July	-5	Dec	43.22
Lansdale	50.7	102	July	0	Jan	37.54
Lebanon	45.9	96	July	-5	Jan	40.79
Le Roy	45.9	96	July	-5	Jan	40.79
Ligonier	45.9	96	July	-5	Jan	40.79
Lock Haven	45.9	96	July	-5	Jan	40.79
Lock No. 4	50.6	101	July	2	Feb	33.75
McConnellsburg	50.6	101	July	2	Feb	34.47
Mahoning	50.9	97	July	-20	Jan	34.59
New Castle	50.9	97	July	-20	Jan	34.45
Oil City	50.9	97	July	-20	Jan	32.07
Ottsville	50.9	97	July	-20	Jan	38.89
Parker	54.4	103	July	10	Dec	41.62
Philadelphia (2)	52.9	100	July	10	Jan	39.73
Philadelphia (3)	51.4	101	July	-1	Jan	43.05
Phoenixville	52.1	100	July	3	Jan	42.48
Point Pleasant	52.1	100	July	3	Jan	43.43
Pottstown	52.1	103	July	3	Jan	45.50
Quakertown	46.1	95	July	-27	Jan	36.35
Reading	44.5	92	June	-11	Jan	37.50
Ridgway	44.5	92	June	-11	Jan	51.42
Saegertown	49.6	101	July	0	Jan	48.25
Salem Corners	46.4	95	July	-15	Feb	35.31
Saltsburg	46.4	95	July	-15	Feb	40.13
Seisholtzville	47.6	97	July	-1	Jan	43.76
Selins Grove	47.6	97	July	-1	Jan	41.25
Somerset	47.6	95	July	-4	Dec	41.57
Smiths Corners	47.6	95	July	-4	Dec	35.48
South Eaton	52.0	99	July	6	Jan	40.98
State College	52.0	99	July	6	Jan	40.29
Stoyestown	52.4	93	July	-9	Jan	37.05
Swarthmore	52.4	93	July	-9	Jan	44.68
Uniontown	42.9	96	July	-14	Jan	47.56
Warren	42.9	96	July	-14	Jan	37.92
Wellsboro	51.5	99	July	6	Dec	45.72
West Chester	50.1	100	July	2	Jan	37.93
West Newton	46.5	97	July	-8	Jan	51.93
Wilkesbarre	46.5	97	July	-8	Jan	33.19
Wysox	46.5	97	July	-8	Jan	33.19
York	46.5	97	July	-8	Jan	33.19
Rhode Island.						
Bristol	49.3	90	July	3	Jan	31.81
Kingston (1)	47.8	92	July	-1	Jan	42.63
Kingston (2)	47.8	91	July	-3	Jan	41.74
Olneyville	51.3	94	June	2	Dec	36.26
Pawtucket	50.6	96	June	2	Jan	37.39
Providence (1)	48.0	94	June	0	Jan	36.78
Providence (3)	48.0	94	June	0	Jan	36.78
South Carolina.						
Anderson	60.8	96	July	20	Dec	54.29
Belmont	60.8	96	July	20	Dec	51.04
Camden	60.8	96	July	20	Dec	38.28
Charaw (2)	60.8	96	July	20	Dec	56.76
Effingham	60.8	96	July	20	Dec	45.33
Mount Carmel	60.8	96	July	20	Dec	46.89
Nichols	65.3	96	July	27	Dec	54.85
Port Royal	58.9	99	July	15	Dec	39.81
Simpsonville	61.2	94	June	19	Dec	44.89
Statesburg	61.2	94	June	19	Dec	39.04
Tillers Ferry	61.2	94	June	19	Dec	41.37
Waterloo	61.2	94	June	19	Dec	41.77
South Dakota.						
Alexandria	45.9	104	July	-35	Jan	23.47
Aberdeen	45.9	100	June	-34	Jan	30.24
Brookings	41.7	97	July	-34	Jan	24.82
Castlewood	41.7	97	July	-34	Jan	18.36
Cross	42.1	95	Aug	-28	Jan	30.24
Elkton	38.3	99	Aug	-34	Jan	30.42
Faulkton	40.7	97	Aug	-32	Jan	26.36
Flandreau	41.5	98	Sept	-36	Jan	26.57
Forestburg	43.7	99	Sept	-35	Jan	24.09
Fort Meade	45.0	102	Aug	-20	Jan	17.70
Fort Sully	45.6	107	Aug	-30	Jan	22.39
Frankfort	42.3	101	Aug	-38	Jan	23.17
Gary	41.4	96	July	-30	Jan	28.80
Kimball	44.8	107	Aug	-32	Jan	28.11
Millbank	41.1	100	Sept	-30	Jan	33.58
Mitchell	43.7	98	Aug	-30	Jan	12.47
Oelrichs	44.5	102	Aug	-28	Jan	26.35
Onida	40.4	106	Aug	-36	Jan	23.88
Parker	44.2	102	July	-37	Jan	26.82
Parkston	43.7	100	July	-22	Jan	31.41
Sioux Falls	43.2	98	Aug	-40	Jan	26.82
Spearfish	45.9	102	July	-24	Jan	31.41
Webster	43.0	99	Sept	-38	Jan	31.41

Annual summary for 1892—Voluntary stations—Continued.

State and station.	Temperature—degrees Fahrenheit.					Precipitation in inches and hundredths.
	Mean for 1892.	Extremes for 1892.				
		Max.	Month.	Min.	Month.	
<i>South Dakota—Continued.</i>						
Wentworth.....	40.5	99	Aug.	-34	Jan.	21.41
Wessington Springs.....	44.4	105	Aug.	-39	Jan.	23.67
Wolsey.....	41.5	95	July	-36	Jan.	28.88
<i>Tennessee.</i>						
Andersonville.....	56.2	94	July	8	Dec.	46.22
Ashwood.....	66.0	93	June	10	Dec.	63.41
Austin.....	57.4	98	June	-2	Mar.	49.04
Bothel Springs.....	58.8	90	June	5	Jan.	57.63
Carthage.....						43.86
Charleston.....						63.12
Clarksville.....	57.3	94	July	5	Jan.	53.90
Columbia.....						67.14
Fayetteville.....						51.19
Florence.....	57.1	94	June	11	Mar.	45.34
Franklin.....						53.20
Jacksboro.....						52.17
Johnsonville.....						70.81
Kingston.....						51.58
Loudon.....						56.60
Lynnville.....	57.4	97	July	0	Mar.	62.30
Missionary Ridge.....	56.8			12	Dec.	
Newport.....	55.0	97	July	8	Jan.	36.99
Nunnally.....	57.9	93	June	5	Mar.	60.71
Riddleton.....	57.2	90	July	-4	Mar.	50.19
Rockwood.....						54.04
Rogersville.....		93	July	10	Dec.	45.07
Rugby.....	53.6	91	June	5	Dec.	53.56
Savannah.....	57.7	96	July	9	Jan.	60.45
Sharp.....	58.4	96	June	6	Dec.	65.50
Springdale.....						41.16
Strawberry Plains.....						41.16
Waynesboro.....	55.4	93	July	1	Mar.	60.70
<i>Texas.</i>						
Arthur City.....						61.03
Austin (1).....	66.7	100	July	16	Jan.	
Austin (2).....	67.8	97	July	17	Jan.	
Brady.....		99	July	5	Jan.	
Brazoria.....	67.6	94	Aug.	20	Dec.	38.96
Brenham.....	69.6	101	July	16	Jan.	38.77
Brownwood.....	64.3	102	July	7	Jan.	28.50
Burnet.....	65.2	93	July			34.72
Camp Eagle Pass.....	70.2	107	May	11	Jan.	22.97
Camp Pena Colorado.....	61.1	101	June	1	Jan.	12.03
Childress.....	60.2	106	June	-8	Jan.	14.62
College Station.....	69.2	105	July	15	Jan.	43.88
Columbia.....	69.2	96	June	20	Jan.	27.97
Corsicana (2).....	63.7	99	July	10	Jan.	36.84
Cuero.....	71.1	101	July	20	Jan.	31.95
Durham.....						17.87
Duval.....	68.9	103	July	17	Jan.	37.15
Forestburg.....	62.9	102	July	0	Jan.	
Fort Clark.....	68.4	103	June	11	Jan.	13.99
Fort Hancock.....	59.9	111	June	-1	Jan.	6.96
Fort McIntosh.....	74.0	105	May	21	Jan.	21.05
Fort Ringgold.....	73.7	109	May	16	Jan.	19.25
Fredericksburg.....	64.6	98	July	12	Jan.	25.85
Gainesville.....	61.9	98	July	-1	Jan.	50.05
Graham.....						30.53
Grape Vine.....	65.3	100	July	9	Jan.	38.53
Hallettsville.....	69.4	101	July	17	Dec.	28.67
Hartley.....	55.5	102	July	-1	Jan.	10.66
Houston.....	68.2	98	June	19	Dec.	41.23
Huntsville.....	67.5	96	July	17	Jan.	52.19
Menardville.....	62.9	97	July	7	Jan.	28.49
Mesquite.....	63.6	100	July	5	Jan.	42.71
Mountain Spring.....	63.0	100	July	1	Jan.	48.03
New Braunfels.....	68.1	98	July	18	Jan.	28.06
Ochiltree.....						18.67
Quanah.....	61.2	106	July	-6	Jan.	
Roby.....	62.2	105	July	0	Jan.	39.05
Round Rock.....	68.5	100	July	16	Jan.	34.20
Silver Falls.....	60.7	104	June	-10	Jan.	15.37
Waco.....	67.0	99	July	7	Jan.	29.87
<i>Utah.</i>						
Cisco.....	52.9	107	Aug.	-10	Jan.	6.17
Corinne.....	50.6	101	July	-12	Jan.	14.62
Deseret.....	48.8	102	Aug.	-11	Dec.	9.47
Fort Du Chene.....		100	Aug.	-17	Jan.	5.46
Grouse Creek.....						7.94
Kelton.....	50.4	106	June	-14	Jan.	5.99
Lake Park.....	49.1	99	Aug.	-1	Dec.	14.95
Loa.....	43.9	95	June	-19	Dec.	3.05
Loose.....	46.7	108	June	-5	Jan.	8.55
Moab.....	52.9	103	July	3	Jan.	6.61
Mount Carmel.....	49.3	99	June	2	Jan.	10.21
Ogden (1).....	52.3	100	July	2	Dec.	14.20
Ogden (2).....	53.2					16.81
Parowan.....						11.00
Promontory.....	48.8	102	Aug.	-16	Jan.	11.40
Richfield.....	49.0	100	June	-12	Dec.	4.64
<i>Vermont.</i>						
Brattleboro (1).....	46.8	98	June	-12	Jan.	33.61
Burlington.....	45.8	92	July	-10	Jan.	42.24
Chelsea.....	38.7	86	July	-16	Dec.	38.85
Cornwall.....						30.38
Enosburg Falls.....	41.9	93	June	-30	Jan.	49.99
Hartland.....	42.1	90	June	-17	Feb.	39.08
Stratford.....	42.2	88	June	-13	Dec.	36.87
Vernon.....	46.5	96	June	-12	Feb.	39.49
Wells.....		90	July	-14	Jan.	42.82

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		Mean for 1892.	Extremes for 1892.				
			Max.	Month.	Min.	Month.	
Virginia.		°	°		°		Inches.
Abingdon.....							44.67
Ashland.....		55.5	99	July	4	Jan	
Avon.....		55.0	102	July	3	Feb	42.52
Bedford City.....		55.3	95	July	13	Jan	35.83
Big Stone Gap.....		50.8	93	July	2	Dec	52.88
Birdsneat.....		57.3	95	July	14	Jan	48.60
Christiansburg.....							33.49
Clarksville.....							36.26
Dale Enterprise.....		53.3	97	July	-8	Feb	37.99
Danville.....							39.60
Marion.....		52.6	93	July	2	Dec	40.75
Nottaway.....		56.3	106	July	5	Jan	41.79
Petersburg.....			100	July	8	Dec	43.12
Richmond.....		58.9	102	July	9	Jan	37.63
Spottsville.....		55.9	98	July	0	Dec	48.44
Standardsville.....		54.8	101	July	11	Feb	41.90
Statton.....		52.6	98	July	0	Feb	40.18
Woodstock.....							35.66
Washington.							
Aberdeen.....		49.4	84	Aug	25	Dec	72.10
Chehalis.....		50.8	96	May	24	Feb	37.59
East Sound.....		50.7	81	Aug	16	Dec	30.97
Fort Simcoe.....		53.5	102	June	8	Dec	12.34
Fort Spokane.....		47.9	104	July	-6	Jan	17.72
Fort Townsend.....		49.0	85	June	18	Dec	23.50
Madrone.....		51.2	80	June	25	Dec	37.79
Doe Bay.....		49.5	83	June	22	Dec	31.01
Pomeroy.....		53.1	96	June	0	Dec	13.36
Seattle.....		53.8	94	June	26	Dec	34.49
Tacoma.....		51.3	92	June	22	Dec	37.63
West Virginia.							
Buckhannon (2).....		50.6	95	July	-10	Dec	44.75
Charleston (1).....							43.54
Ella.....		50.0	91	July	-2	Dec	36.70
Glenville.....		51.8	93	July	-6	Dec	42.43
Grafton.....		51.5	99	June	-5	Feb	39.67
Harpers Ferry.....							33.93
Hinton.....							34.44
Morgantown (1).....							42.41
Nuttallburg.....		54.6	98	June	3	Dec	40.34
Pleasant Hill.....		46.5	90	July	-6	Dec	
Point Pleasant.....							39.39
Rowlesburg.....							39.91
Tannery.....		49.7	97	July	-8	Dec	
Weston.....							48.76
Wheeling (2).....		54.6	97	July	2	Jan	33.12
White Sulphur Springs.....							32.60
Wisconsin.							
Amherst.....		41.6	94	July	-26	Jan	32.29
Baraboo.....		43.0	93	July	-20	Jan	37.40
Barron.....		39.3	91	July	-39	Jan	33.60
Bayfield.....		39.6	96	July	-17	Feb	26.26
Beaver Dam.....		43.9	98	July	-14	Dec	35.53
Black River Falls.....		42.3	98	July	-26	Jan	35.91
Cadiz.....		43.2					28.27
Centralia.....		41.8	100	July	-25	Jan	26.22
Chippewa Falls.....							29.59
Crandon.....							35.87
Delevan (near).....		41.8			-19	Jan	35.19
Depere.....		43.1	93	July	-19	Jan	33.31
Embarrass.....		42.1	90	June	-26	Jan	44.97
Florence.....			95	June	-29	Jan	32.22
Fond du Lac.....		42.6	92	July	-26	Jan	34.34
Harvey.....		44.1	96	July	-13	Jan	41.53
Hillsborough.....		41.6	94	July	-25	Jan	38.73
Janesville.....		45.6	94	July	-13	Jan	
Koenenick.....		43.1	98	July	-24	Jan	35.20
Madison.....		44.4	90	July	-11	Jan	37.07
Manitowoc.....		44.1	95	July	-18	Jan	32.76
Meadow Valley.....		42.8	96	July	-22	Jan	32.76
Medford (1).....							37.33
Medford (2).....		40.4	93	June	-28	Jan	36.06
Menomonie.....		41.7	98	July	-30	Jan	38.45
Neillsville.....		41.5	92	June	-27	Jan	40.29
Oconomowoc.....		44.3	93	July	-21	Dec	40.56
Oconto.....		42.8	93	July	-31	Jan	29.22
Oacola.....		41.8	94	July	-37	Jan	34.13
Oshkosh.....		44.0	92	July	-16	Jan	30.00
Pepin.....							33.20
Portage.....							41.05
Prairie du Chien.....		46.7	98	July	-20	Jan	41.90
Shawano.....		42.0	92	July	-20	Jan	28.28
Shell Lake.....		40.1	91	July	-33	Jan	27.73
Sparta.....		43.4	95	July	-27	Jan	39.05
Viroqua.....		42.7	90	July	-20	Jan	39.80
Waukesha.....							34.66
Westfield.....		42.9	94	July	-23	Jan	34.29
Weston.....		41.1	95	July	-24	Jan	38.33
Wyoming.							
Camp Pilot Butte.....		41.5	95	Aug	-27	Dec	
Casper.....			112	July	-34	Dec	
Evanston.....			93	Aug	-24	Dec	
Fort McKinney.....		45.3	99	Aug	-24	Jan	12.35
Fort Washakie.....		43.0	94	July	-30	Jan	12.23
Fort Yellowstone.....		38.3	91	Aug	-22	Jan	19.07
Lander.....			92	Aug	-26	Jan	
Lusk.....		43.1	100	Aug	-25	Jan	18.46
Saratoga.....			92	Aug	-26	Dec	
Sundance.....			97	Aug	-26	Jan	
Wheatland.....		49.5	109	July	-30	Jan	14.51

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Stations.	Barometer.	Departure.	Temperature.	Departure.	Precipitation.	Departure.	Prevailing wind.
	Inches.	Inches.	°	°	Inches.	Inches.	
Saint John's, N. F.	29.91	.....	41.9	+0.5	.....	.....	nw.
Sydney, C. B. I.	29.92	-.03	42.9	+2.1	51.73	-0.61	sw.
Halifax, N. S.	29.96	-.03	43.6	+1.4	53.50	-1.94	nw.
Grand Manan, N. S.	29.95	.....	43.2	.....	44.15	-0.47	w.
Yarmouth, N. S.	29.97	-.02	43.5	+0.4	52.01	+5.88	sw.
Saint Andrews, N. B.	29.93	.....	41.9	.....	38.60	-1.42	nw.
Charlottetown, P. E. I.	29.92	.....	42.5	.....	39.75	-1.03	sw.
Chatham, N. B.	29.92	-.05	40.0	+3.5	42.56	-1.40	w.
Father Point, Que.	29.93	-.02	35.5	+1.2	30.45	+0.65	w.
Quebec, Que.	29.98	.00	38.7	+1.2	34.54	-8.24	w.
Montreal, Que.	29.99	.00	41.1	+0.3	42.04	+3.23	sw.
Rockcliffe, Ont.	29.98	-.01	37.4	+1.9	29.48	-1.57	nw.
Kingston, Ont.	30.01	.00	42.3	-0.2	34.99	+1.05	sw; ne.
Toronto, Ont.	30.04	+0.01	43.8	+0.4	29.52	-1.23	w.

Annual summary for 1892—Canadian stations—Continued.

Stations.	Barometer.	Departure.	Temperature.	Departure.	Precipitation.	Departure.	Prevailing wind.
	Inches.	Inches.	°	°	Inches.	Inches.	
White River, Ont.	29.94	.....	31.4	.....	13.33	.....	n.
Port Stanley, Ont.	30.05	.....	44.2	.....	38.31	+4.14	w.
Saugeen, Ont.	30.04	+0.03	42.5	+1.3	41.51	+7.13	s; e.
Parry Sound, Ont.	30.02	+0.02	40.0	+1.5	43.69	+6.57	w.
Port Arthur, Ont.	30.02	+0.02	34.6	+1.2	19.12	-4.93	nw.
Winnipeg, Man.	30.04	+0.02	31.9	+0.9	19.89	-3.56	s.
Minnedosa, Man.	30.01	+0.02	30.6	+1.1	14.25	-3.48	nw.
Qu'Appelle, Assiniboia.	30.02	+0.03	32.0	+0.1	16.45	+1.51	nw.
Medicine Hat, Assiniboia.	29.96	-0.01	39.7	+0.2	12.24	+1.47	w.
Swift Current, Assiniboia.	30.01	+0.01	35.9	+0.6	20.30	+4.45	w.
Calgary, Alberta.	29.97	-0.01	36.2	+0.3	7.91	-5.37	w.
Edmonton, Alberta.	29.98	34.4	-2.2	16.77	+2.96	nw.
Prince Albert, Saskatchewan.	29.98	29.4	11.23	w.

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Chart I. Annual Mean Pressure and Prevailing Winds.

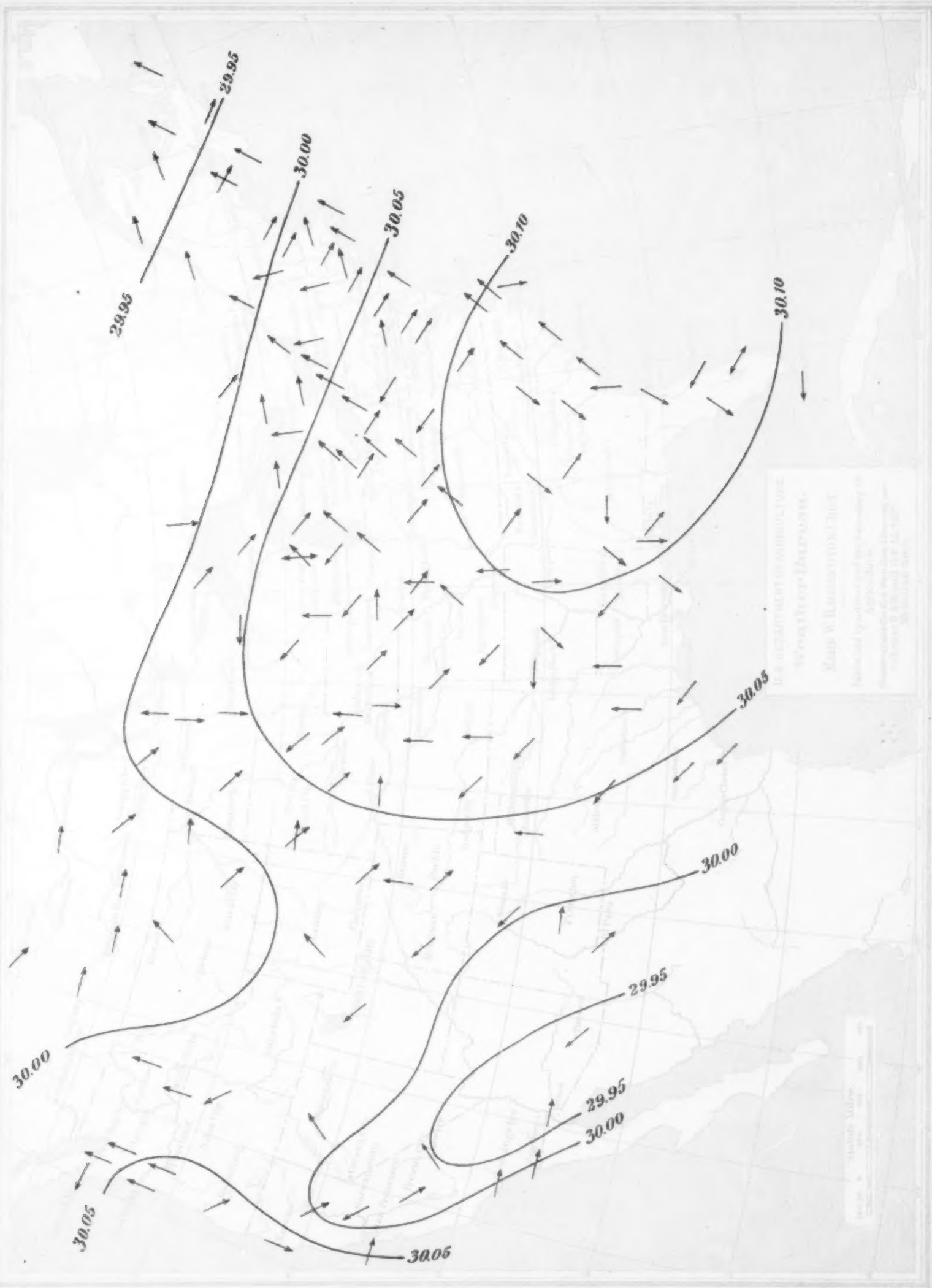


Chart II. Annual Mean Temperature and Departure from Normal Temperature, 1892.



Chart III. Maximum Temperature, 1892.

Form 1061 P

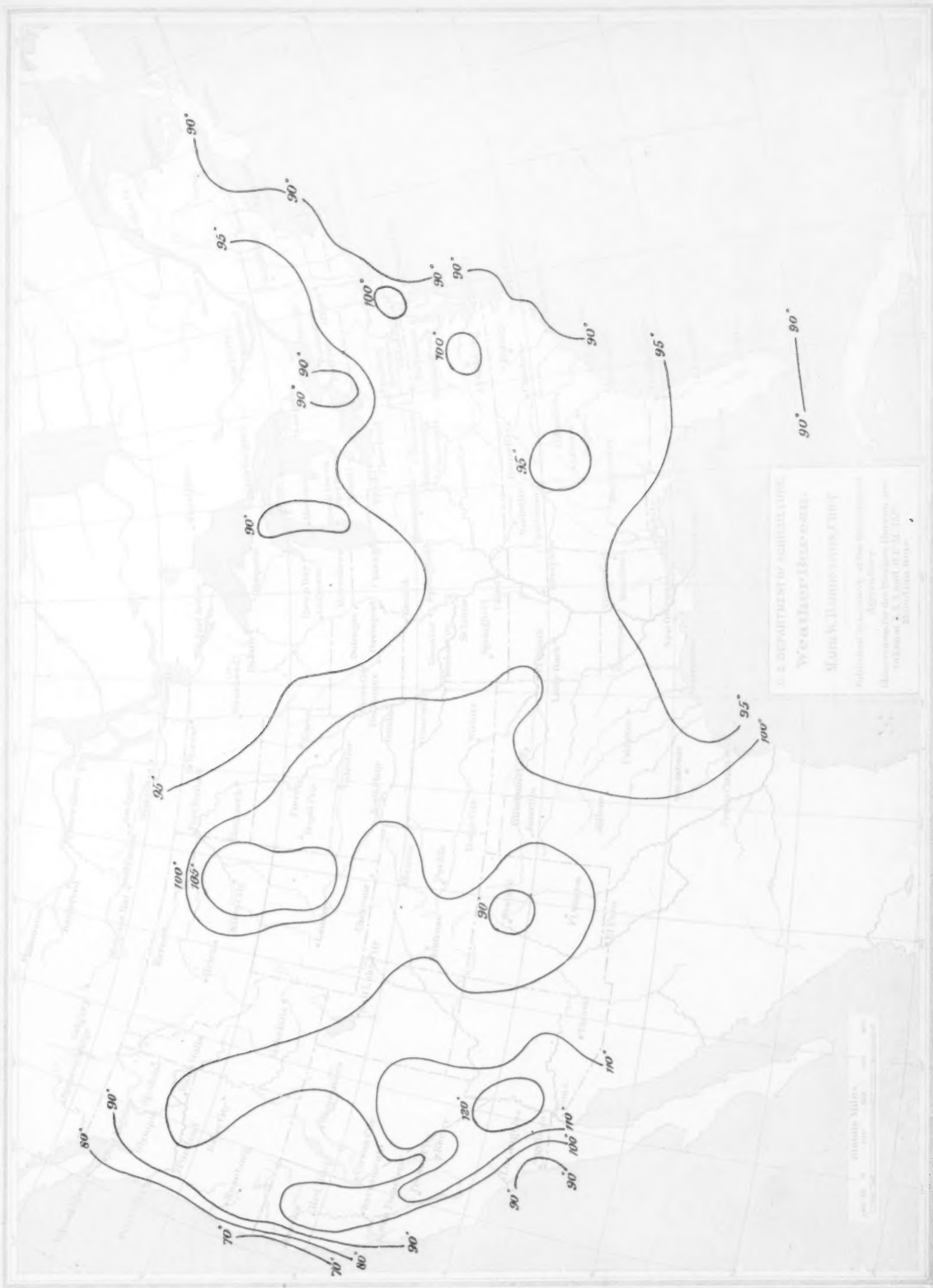


Chart IV. Minimum Temperature and Limits of Freezing Weather, 1892.

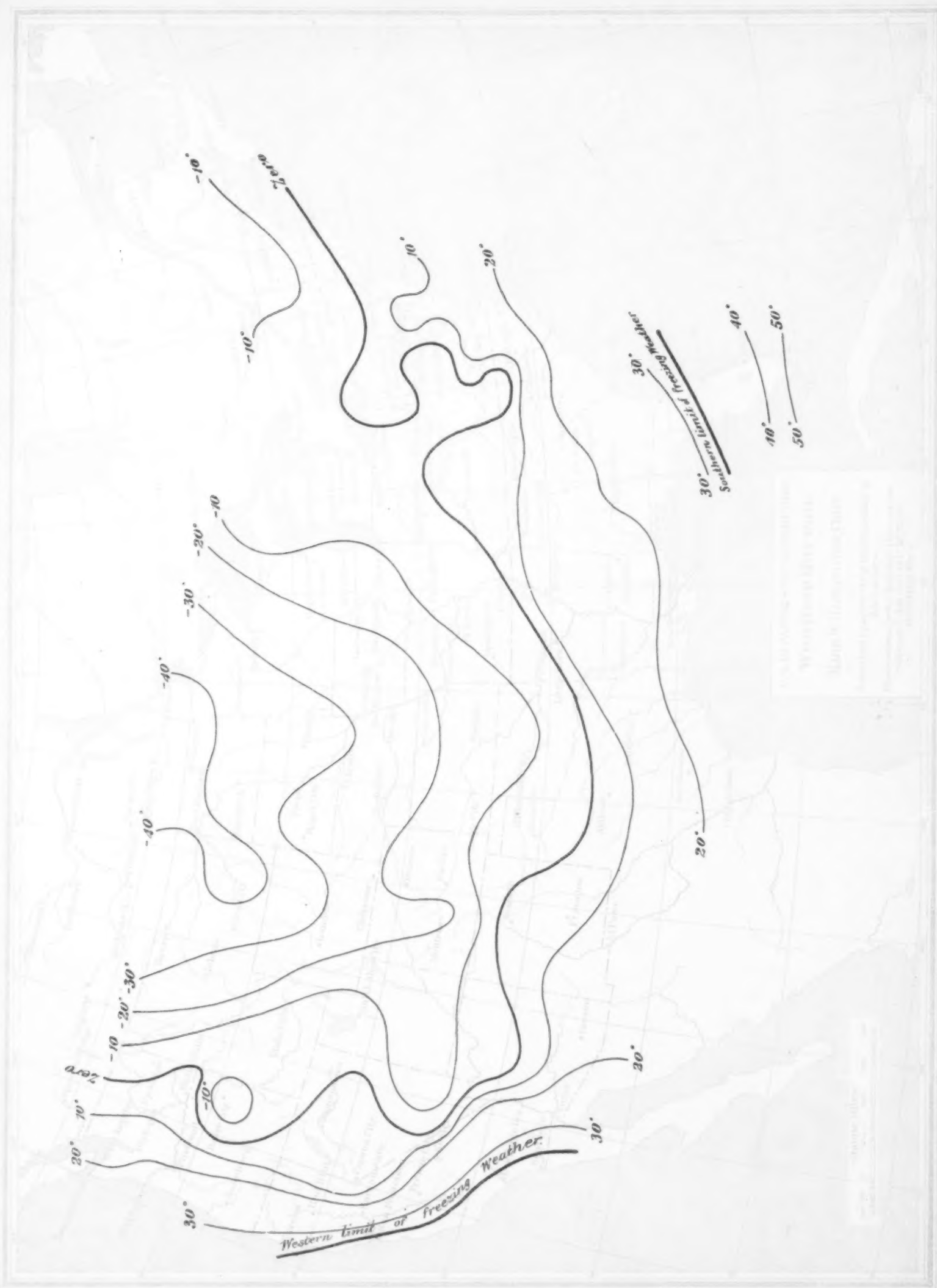


Chart V. Temperature Ranges, 1892.

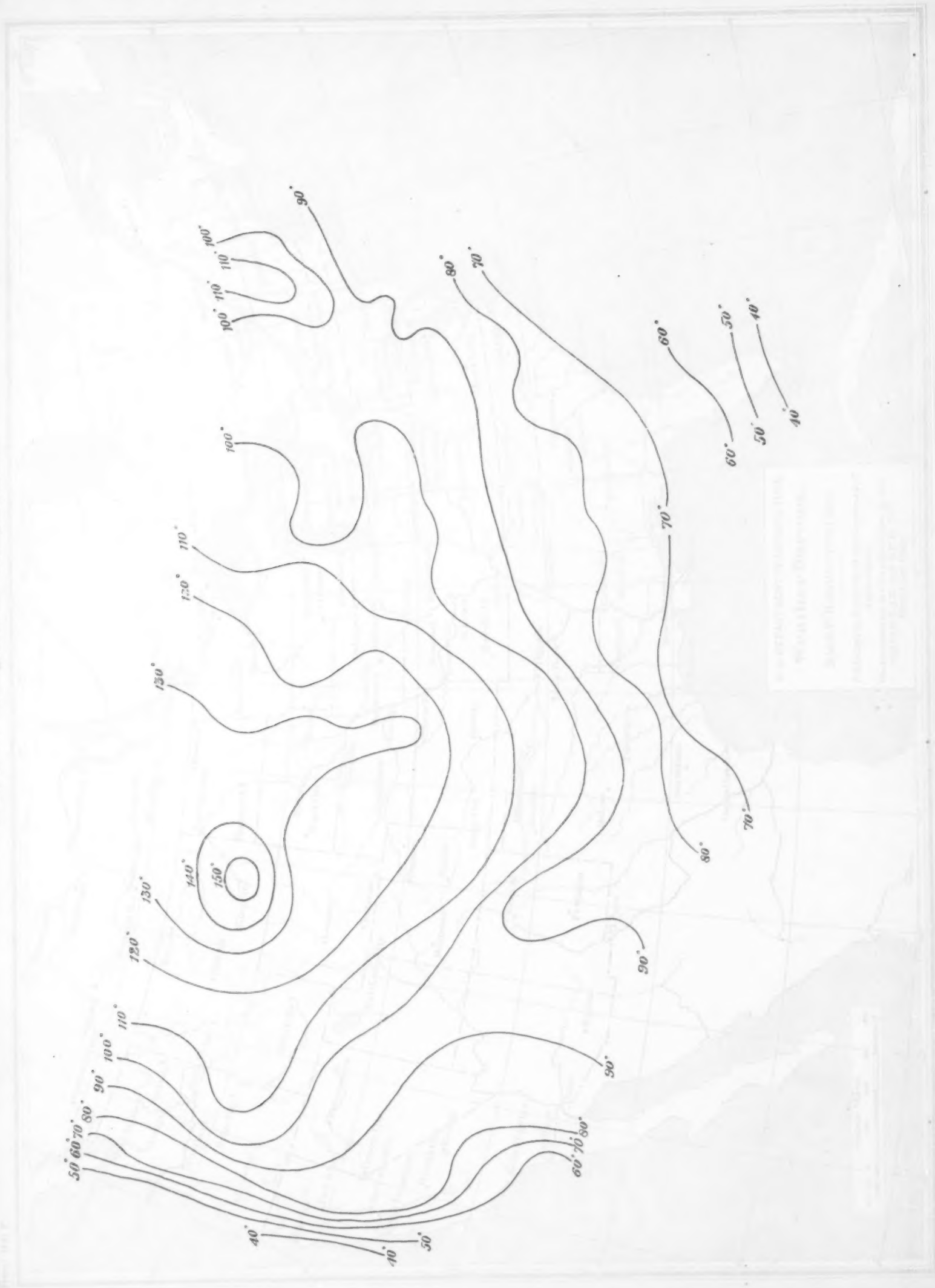
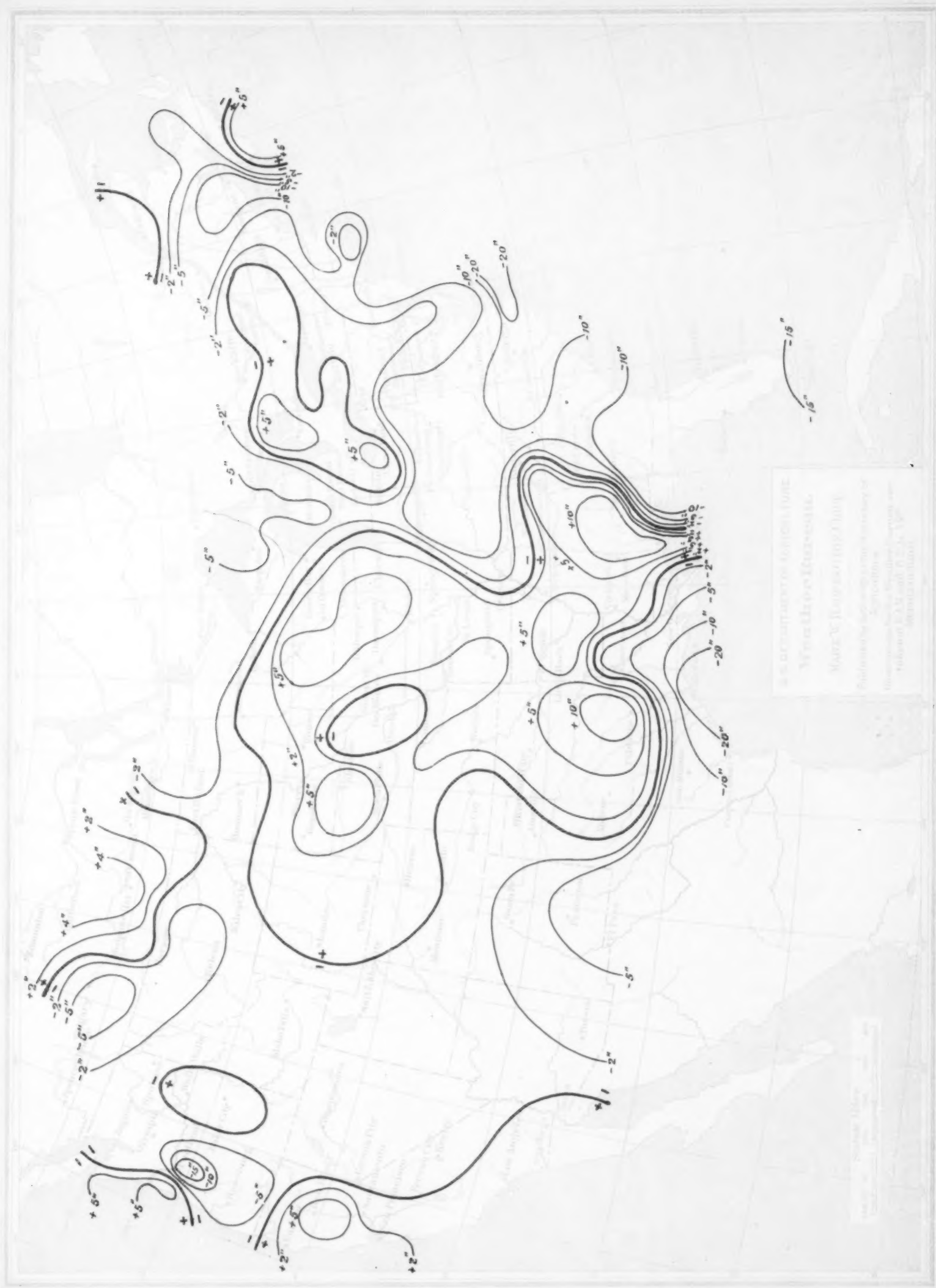


Chart VI. Annual Precipitation, 1892.



Chart VII. Departure from Annual Precipitation, 1892.



UNITED STATES OF AMERICA:
DEPARTMENT OF AGRICULTURE.

ANNUAL SUMMARY FOR 1892.

SUPPLEMENT TO

MONTHLY WEATHER REVIEW

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PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

WASHINGTON, D. C.:
WEATHER BUREAU.
1893.